"Strengthening Fisheries Management in ACP Countries"

# Final Technical Report

## DEVELOPMENT OF AN ONLINE DATABASE FOR THE INDIAN OCEAN TUNA COMMISSION (IOTC) CONSERVATION AND MANAGEMENT MEASURES

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**A project implemented by:**

AGORA 2000

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## ACRONYMS & ABBREVIATIONS

| | |
|---|---|
| **ACP** | African, Caribbean and Pacific |
| **CMF** | Content Management Framework |
| **CMS** | Content Management System |
| **CMMs** | Conservation and Management Measures |
| **CPUE** | Catch Per Unit Effort |
| **CSS** | Cascading Style Sheet |
| **CU** | Coordination Unit |
| **DB** | Database |
| **EU** | European Union |
| **FAO** | Food and Agriculture Organisation |
| **FTR** | Final Technical Report |
| **GB** | Giga Byte |
| **IOTC** | Indian Ocean Tuna Commission |
| **IR** | Inception Report |
| **IT** | Information Technology |
| **IUU** | Illegal Unreported Unregulated, |
| **KE** | Key Expert |
| **MB** | Mega Byte |
| **NGOs** | Non-Governmental Organisations |
| **ORT** | Other Recurrent Transactions |
| **PMU** | Programme Management Unit |
| **RFMOs** | Regional Fisheries Management Organizations |
| **RFU** | Regional Fisheries Unit |
| **SMART** | Specific, Measurable, Attainable, Relevant and Time bound |
| **ToR** | Terms of Reference |
| **TT** | Technical Team |
| **UI** | User Interface |

# EXECUTIVE SUMMARY

The Indian Ocean Tuna Commission (IOTC) is currently developing a new website taking into account the growing number of documents that need to be made available on the website and the new activities that require the website to be linked to several databases (vessel record, statistical documents for example). The objective of this new website is to make all information available in a simple way and to facilitate the navigation through the different sections of the website. This new website is developed by Maven, a local Seychelles company.

One of the information that needed to be available on this new website was the different **Conservation and Management Measures (CMMs)**, otherwise known as IOTC Resolutions. To date, those IOTC CMMs were only accessible as PDFs, and therefore were not easily accessible or searchable. The new IOTC website would benefit from a dedicated section that will allow users to quickly browse, find and download IOTC Resolutions in various formats, by year, number or keyword.

**AGORA'2000 in collaboration with the KE, Software Programmer Mr Stefano PIREDDA**, has been chosen by the ACP Fish II Programme to develop this online database populated with IOTC CMMs since 1998, and its search interfaces operational; as well as to develop a Manual for database management and updating.

In the definition of the proposed methodology, four consequent project components were defined in the Technical Offer for this project. Each component was scheduled as a "Phase".

***Phase I, Inception and Needs Assessment***

This phase has been of particular importance for the entire project and has allowed for the identification of the Beneficiary expectations as well as for the definition of a final structure for the Database. Upon his arrival in Victoria (Mahé, Seychelles), the KE with **IOTC Team members David WILSON, Alejandro ANGANUZZI, Gerard DOMINGUE, Florian GIROUX and Olivier ROUX** have defined the concrete needs of the IOTC and a feasible Work Plan, taking into account all the aspects touched by the project.

The main activities during this Phase I were: *(1) Brief by ACP Fish II programme and IOTC; (2) Meet with the Technical Team established by the IOTC; (3) Background literature review and analysis (IOTC has also provided a PDF copy of all the CMMs document in both English and French language); (4) Redefinition of the intervention strategy and prepare Work Plan; (5) IOTC website analysis (server configuration, Drupal modules and system configuration, MySQL database table structure and data) and analysis of similar systems developed by other institutions.*

**This Inception Phase I gave the KE the opportunity to define the DB Application Structure**: DB beneficiaries, DB level of access, Communication modalities between anonymous users and the DB, file and fields nomenclature, keywords lists to be used for searching each CMM, back-office and front-office functionalities with new mockups proposals (wireframes) for a friendly UI for administrators, editors and anonymous users.

This Inception Phase I also solved a major problem: the website on which the application should be developed was not in a finalized and stable state. After several discussions, Maven has provided a stable but not finalized version of the website and they have accepted to stop their programming, of course with IOTC approval. This Phase I has length 10 working days instead of the 5 days previously expected in the Technical Offer, forcing the KE to perform the Phase II in 20 days minus 5 days.

### *Phase II, Database development*

The main activities during this Phase II were initially : *(1) Create the database of all IOTC CMMs; (2) Define a list of Keywords; (3) Make provisions for indexing the contents of CMM; (4) Populate the database with IOTC CMM since 1998; (5) Interfaces integrated into the IOTC website.*

It has been decided with IOTC, that they would benefit of a powerful but easy UI to create, edit, delete any CMMs of the database directly in the Drupal back office. Therefore, the population the database with IOTC CMMs shall be done by the IOTC itself. In the same idea, the list of Keywords can be easily created, edited or deleted by the IOTC itself.

The main activities during this Phase II became : *(1) Configuring Drupal and its modules; (2) Developing the application (back office); (3) Creating the web pages for the users (front office); (4) Designing the web pages for the users; (5) Delivering the application.*

All those steps have been done without encountering any problems but two more days were used to finalize the application. This Phase II has length 17 days instead of the 15 days foreseen.

**The application has been delivered to the IOTC Technical Team on August 18, 2012.**

This delivery was made of 2 main files (database and Drupal files backup) completed with all the PDF documents written during the project: Editor Manual, UI Specifications, Technical Documentation, Users login & password. Some bugs and issues have been identified and listed in the “Technical Documentation”. They are related to Drupal contrib modules. They don’t have much impact on the application stability but it will be necessary to update those modules as soon as new stable version will be available online on Drupal.org.

Public users and IOTC team will have the opportunity to use this new CMM Database Application as soon as Maven has finalized this new IOTC website.

### *Phase III , Manual development*

This phase III was divided into three steps : *(1) Implementation of the online help related to Drupal fields; (2) Drupal management and updating manual draft (PDF); (3) 1 day training.*

**A 1-day training has been delivered on August 16, 2012** and organized into two parts: *(1) In the morning, relative to the Editors; (2) In the afternoon, relative to IOTC Administrators and Maven Seychelles’ developers.*

### *Phase IV, Reporting and Project closure*

This document is about Phase IV.

# INTRODUCTION

This report is the conclusion of four weeks of development for which no major problem has been encountered. The application has been delivered on time with all the tools required and sometimes with some improvements compared to the initial technical specifications and ToR. A 1-day training has been provided to the IOTC Technical Team and the Editor Team.

The "Technical Documentation" PDF is an important complement to the "Editor manual". This document will help Maven Seychelles' developers and the IOTC Technical Team to install the application in the new host server. This technical document provides all the technical information of application. It also includes some comments on its use and installation.

# 1. BACKGROUND

Tuna and tuna like fishes are among the migratory fisheries species. They move constantly in search for food, for seasonal movements and often over long distances. Therefore, tunas are among the species for which international cooperation is crucial to ensure conservation and management. Regional Fisheries Management Organizations (RFMOs), represent the main instrument for cooperation among the countries. There are five tuna RFMOs, covering different regions, among which the Indian Ocean Tuna Commission.

The area of competence of the IOTC is the Indian Ocean and adjacent seas, north of the Antarctic Convergence, covered for the purpose of conserving and managing stocks that migrate into or out of the Indian Ocean. Membership is opened to Indian Ocean coastal countries and to countries/regional economic organisations that are members of the United Nations (or one of its specialised Agencies) and are fishing for tuna in the Indian Ocean.

The IOTC is maximising the opportunities offered by the internet and instruments for interactive communication, given its wide membership and the complexity of many of the issues at hand. As part of this approach, the IOTC new website - currently under development by Maven, a company based in Mahè – has to take into account the growing number of documents that need to be made available on the website and the new activities that require the website to be linked to several databases (vessel record, statistical documents for example). The objective of this new website is to make all information available in a simple way and to facilitate the navigation through the different sections of the website.

**One of the most important information that needs to be available on this website, are the different Conservation and Management Measures (CMM), otherwise known as IOTC Resolutions, that have been adopted by the IOTC since 1998.**

To date, the IOTC CMMs can be accessed through a collection of all the measures adopted since 1998 in a PDF document which is periodically updated. This document does not present the CMM in a searchable or easily accessible format for potential users. The new IOTC website would benefit from a dedicated section that will allow users to quickly browse, find and download IOTC Resolutions in various formats, by year, number or keyword.

This project was aimed at providing technical assistance to the IOTC Secretariat in supporting the Member States in complying with the agreed CMM, by developing an online database populated with IOTC CMM since 1998, with search interfaces operational; and a Manual for database management and updating.

**AGORA' 2000** was chosen by the **ACP Fish II Programme** to manage and develop this project, in collaboration with a KE, Software Programmer **Mr Stefano PIREDDA.**

## 2. APPROACH TO THE ASSIGNMENT

A smooth and rapid completion of the Inception Phase I, coinciding with the needs assessment, is crucial to fully adapt the strategy of intervention to the concrete needs of the Beneficiary as well as finalize a feasible Work Plan, taking into account all the aspects touched by the project.

AGORA'2000 always carry out as early as possible a thorough assessment of the intervention context of the assignment, starting well before the submission of the technical offer, and continued on the ground together with the key expert during the inception phase.

This methodological step is a must for granting the assignment all chances of success. Indeed, it helps to understand who is who in the Beneficiary organisation, what are the needs and expectations of each one, what is the actual scope and boundaries of the assignment, particularly if considering the frequent coexistence of different technical assistance inputs and funding.

This approach avoids wasting time on false tracks and steps, as from the first days of implementation, and minimises misunderstandings in results expectations.

In this project, this Phase I has been a little bit longer than expected, but this as result to a fully functional application which fully meets IOTC expectations and delivered on time. The IOTC has also widely praised the work done by the KE in the presentation of the application before and during the 1-day training.

# 3. COMMENTS ON THE TERMS OF REFERENCE

Most of the ToR remain valid but a few changes were made to the original document. The following table shows the completion of terms of reference:

| No. | Specific Activities from Terms of Reference | How Completed Through the Assignment |
|---|---|---|
| 1 | Briefing with ACP Fish II Programme and IOTC Secretariat; | Fully completed. ToR remain valid. |
| 2 | Meet with Technical Team established by the IOTC, conduct background literature review and analysis to enable an assessment of the information sharing activities and communication requirements of the IOTC; | Fully completed but it has required 10 days instead of 5 days. This has required to modify point 7 : only 2012 CMMs have been added to the DB instead of all the CMMs. This has been approved by the IOTC. |
| 3 | Prepare detailed work plan and submit to target group and RFU in Kampala and Mozambique; | Fully completed. An IR has given all details and a UI Specifications document has been written. |
| 4 | Create a database of all IOTC CMMs; | Fully completed. The database has been designed, feed and documented in the "Technical Documentation" provided at the end of the project. |
| 5 | Define, together with the IOTC Secretariat, a short list of keywords that would be used to characterize each CMM (e.g. tuna, billfish, by-catch, statistics, IUU); | Fully completed. A tool has been developed that gives the IOTC the ability to create/edit/delete any keyword, group of keyword and its hierarchy. |
| 6 | Make provisions in the database for indexing the contents of CMM in the system so as to facilitate search of content by users; | Fully completed. Two search tools (Basic and Advance) has been developed and fully translated in both English and French. |
| 7 | Populate the database with IOTC CMM adopted since 1998; | Partially completed. Only 2012 CMMs have been added to the database and used as examples for the Training. This has been approved by the IOTC *(see point N°2 of this table)* |
| 8 | Design and create user-friendly interfaces integrated into the (new) IOTC website for easy online access to the CMMs; | Fully completed. The UI follows the design recommendations. |
| 9 | Develop a manual for adding and updating CMMs to the database. | Fully completed. An complete Editor Manual to create/edit/modify/translate any keyword, user or CMM has been written and delivered. |

Due to the reduced timescale during which the project had to be completed, it was decided that CMMs will be provided by the IOTC itself. However the 2012 CMMs have been included in the database by the KE, the process of adding new CMMs is well understood by the TT and documented, and training has been completed to enable the IOTC to do the remaining ones and the IOTC are committed to doing so.

# 4. ORGANIZATION AND METHODOLOGY

In the definition of the proposed methodology, four consequent project components were defined:

- **"Inception and Needs Assessment, Phase I";** this phase coincided with the 2 weeks of implementation and was devoted to the usual activities related to the launch of the project, as well as to the needs assessment.

- **"Database development, Phase II";** this was the central phase of the assignment, for which the KE had an allocation of 15 to 20 working days. It consisted in the activities detailed in the methodological sections.

- **"Manual development, Phase III";** following the development of the database, the KE prepared the Editor Manual for the database management and updating, in line with the indications provided in the methodological section. The KE also carried out a training on the manual for the IOTC staff that will be in charge of developing it.

- **"Phase IV, Reporting and Project closure**" a fourth component, was more horizontal and dedicated to visibility requirements. This phase was devoted to the preparation of the final report and drafts and related project closure activities.

Each of those components / phases was subdivided into steps:

## 4.1. Phase I, Inception and Needs Assessment

This phase was of particular importance for the entire project and allowed for the identification of the Beneficiary expectations as well as for the definition of a final structure for the Database. 5 steps were planned as follows :

- Mobilisation of the Expert
- Brief by ACP Fish II programme & Establishment of IOTC Technical Team (TT)
- Meet with the Technical Team established by the IOTC
- Background literature review and analysis
- Redefinition of the intervention strategy and prepare Work Plan

completed with a sixth step:

- New IOTC website analysis (server conf. + Drupal + MySQL)

## 4.2. Phase II, Database Development

Once the needs assessment was completed, the project can enter in its operational phase, by physically developing the database. In particular, this part of the assignment was focused on the following key steps *(more details are available in the IR)*:

- Writing UI Technical Specifications
- Writing Database Technical Specifications (included in the Technical Documentation)
- Setting up a local development environment
- Configuring Drupal and its modules
- Developing the application management tools
- Creating and designing the web pages for the users
- Delivering the application

Here are the main tasks performed in this Phase II:

- A local development environment (a replica of the Maven's IOTC website for which the development has been temporarily stopped) has been settled up with 9 new modules.
- The database has been designed and implemented according to the technical specifications.
- A new content type called “CMM” (in English) and “MCG” (in French) has been created in Drupal with all the requested fields (CMM title, number, PDF file upload, etc.), organized into group fields to offer a better UI experience and named following the technical specifications nomenclature. All the fields have been translated.
- All the Drupal vocabularies and terms have been created and organized in the database. They have been all translated.
- The Drupal UI has been translated to cover the needs of the CMM application. Those translations will also be used in many other areas of the website.
- An Editor user group has been created with specific permissions (relative to the CMMs) attached with new user accounts (people from the IOTC).
- Two Views have been created with exposed filters based on the fields and the vocabularies already created to offer to web users the two search tools (basic search and advanced search). Each View has been fully translated in both languages with dedicated URLs.
- Some 2012 CMMs have been added to the database for them to be used as examples.
- Unit, integration and functional tests were performed to ensure that each functionality was working properly. Some minor bugs have been encountered due to certain modules.

- Following best practices in open source programming and Drupal best practices, the code and the structure of the entire software is easy to be accessed and understood.

- The application has been delivered in 5 separate files :
    1. Drupal Database (MySQL) backup in a Gzip format
    2. Drupal Files folders (Drupal/PHP) backup in a Zip format
    3. Editor Manual in a PDF format
    4. Technical Documentation in a PDF format
    5. CMM accounts login & password in a TXT format

## 4.3. Phase III, Manual development

3 steps were planned as follows :

- Implementation of the online help related to Drupal fields

- Drupal management and updating manual draft (PDF)

- 1-day training

As required by the ToRs, a comprehensive "Manual for database management and update" has been prepared for operation and maintenance of the database with guidance for the updating of the system or any later fine-tuning. This Manual is a reference guide for the database managers (defined as "Editors" after the project). An "Editor Manual" has been written in a clear and concise language, and easily understood by the readers.

As suggested in the Technical Offer, *"Ideally, to ensure a most effective sustainability of the project's activities and of the database maintenance, during project inception, it could be possible to discuss with the PMU and Beneficiary (TT) the possibility of conducting, in addition to the Manual, a small training for database managers, which can either be dedicated training or on-the-job training. Regardless of the training, the Manual should in any case be developed as a self-sufficient instrument, since it must eventually guide also future database managers that have not been specifically trained on its functioning. The manual will contain 2 macro-sessions: the first one mainly dedicated to non-technical users that will be in charge of DB update and daily content management, the second one dedicated to technicians that in the future might be willing to improve and update the entire system.",* a 1-day training has been scheduled and organized into two parts:

- In the morning, the training was relative to the Editors and based on the "Editor Manual" PDF document that embedded full screenshots of the Application and step by step procedures;

- In the afternoon, the training was about how the application and its database have been developed and configured. This second part was based on the "Technical Documentation" PDF document. This document is intended to be carefully read by IOTC Administrators and Maven Seychelles' developers.

The training was photographed (portrait, scene overview, etc.) and pictures are available on CD-Rom.

As a complement of this training, a comprehensive online help related to the creation/update of a CMM has been also done as a complement to the manual.

Here are the main tasks performed in this Phase III:

- A complete help in both languages has been added to each field of the application for Admin users, Editor Users and Web Users.
- An Editor user manual has been written that explain with step by step procedure and screenshot how to create, modify, delete a CMM, how to search (basic and advance) for a CMM.
- A Technical documentation has been written that give all the information to install the application on the server and how the application has been set up in Drupal. *This document requires a good knowledge of Drupal to be fully understood.*
- A 1-day training has been conducted, in two parts, on August 16, 2012. In the morning, the training was dedicated to the Editors of the website. This first part was based on the Editor manual. In the afternoon, the training was dedicated to the Administrators of the website. This second part was based on the Technical Documentation.
- Some minor changes have been made to the CMM application and a new delivery has been done to IOTC Technical Team, and especially Olivier ROUX on August 17, 2012.

**The application has been delivered to the IOTC Technical Team on August 18, 2012.**

## 4.4. Phase IV, Reporting and Project closure

4 steps were planned as follows :

- Inception Report: Analysis of existing situation and plan of work for the project.
- Draft Final Technical Report: Description of achievements, problems encountered, recommendations and technical proposals suggested by the Consultant, including all key outputs as annexes to the main report (e.g. manuals)
- Final Technical Report: Draft FTR taking into account changes and comments from the IOTC, FRU and CU.
- Final Report: Short description of achievements including problems encountered, recommendations and suggestions together with the FTR and a final invoice and the financial report accompanied by the expenditure verification report.

A Timetable & Manning Schedule was initially proposed in the Technical Offer and updated in the IR.

# 5. CONCLUSIONS AND RECOMMENDATIONS

## 5.1. Regarding the finalization of the website

The CMM database application is now ready to operate. The IOTC technical team has been well trained on how to manage and use it. It is important to recall here that the company Maven will have to use this new version of the site to finalize the IOTC new website.

They should under no circumstances continue to develop on the previous version that did not include the CMM database application.

## 5.2. Regarding the new host provider

As stated in the IR, a new host provider has been chosen (to replace Web.com). It will be necessary to move from one server to another the finalized website in accordance with the recommendations to be issued by Maven. This will require a good technical level in Apache Server environment and some notions on Drupal.

## 5.3. Regarding to the technical maintenance of the website

Some issues and bugs have been identified and are related to Drupal contrib modules. As soon as new development or stable versions are available, it will be necessary to update the modules listed in the "Technical Documentation". This will require a good technical level of Drupal which should be entrusted to a Drupal expert.

**Annex 1: Terms of Reference**

# TERMS OF REFERENCE
# FOR
# DEVELOPMENT OF AN ONLINE DATABASE FOR THE INDIAN OCEAN TUNA COMMISSION (IOTC) CONSERVATION AND MANAGEMENT MEASURES

**Reference EA-5.2-B22**


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# 1. BACKGROUND INFORMATION

## *1.1 Beneficiary country*

The beneficiary countries for this contract are Member States and Co-operating non-Contracting Parties (CPCs) of the Indian Ocean Tuna Commission (IOTC).

## *1.2 Contracting Authority*

**ACP FISH II Coordination Unit**

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## *1.3 Relevant regional background*

The countries of the Indian Ocean region show enormous variety in culture, history, economic development, political maturity and geography. Within such a varied group perhaps the only feature binding them together is the Indian Ocean itself. An FAO review of fisheries in the Indian Ocean in 2006 [1] disaggregated its information into the eastern Indian ocean (including countries such as Bangladesh, India, Malaysia, Thailand and Sri Lanka), north western Indian Ocean (middle east, Egypt Eritrea and Djibouti) and South west Indian Ocean (including states such as Kenya, Tanzania, Mauritius, Mozambique, South Africa).

The FAO review records the scale of the fisheries in the Indian Ocean with the following results: in the large scale sector there are over 1.6 million fisheries operating with 73,000 vessels landing a catch of around 4 million tonnes. The small scale sector is made up of 4.3 million fishers landing around 4.2 million tonnes from 313,000 vessels. It is noted that these data are sourced from the top three (by volume) fisheries for large and small scale within 30 Indian Ocean countries but it does at least, demonstrate the importance of the industry to the region. The total catch in 2009 from the Indian Ocean is estimated at approximately 11 million tonnes. Within these totals, the Indian Ocean tuna fishery is the second largest in the world, with catches estimated at nearly 1.5 million metric tonnes of tuna and tuna-like species annually. Catches from this fishery are of course landed in ports around the Indian Ocean such as South Africa, Seychelles, Mauritius, Kenya, Oman, and Madagascar.

Catches in the Indian Ocean increased gradually from the 1950s to the early 1980s. Through the 1980s the fishing intensified with the arrival of the industrial purse seine fleet, increased activity of the long line vessels and the fleet and the increased use of gill nets. With this intensification there was increased global recognition of the problems facing the tuna fisheries in the Indian Ocean and as the potential for conflict, competition and species collapse became better understood, the need for concerted international action became increasingly obvious. The Indian Ocean Tuna Commission (IOTC) was established within the framework of the Food and Agriculture Organization of the United Nations in 1993 and the Agreement establishing the IOTC came into force in 1996. The objective of the IOTC is to promote cooperation among its Members

[1] FAO 2006 Review of the state of world marine capture fisheries management: Indian Ocean, Fisheries Technical Paper 488, FAO, Rome 2006

with a view to ensuring, through appropriate management, the conservation and optimum utilisation of stocks covered by the Agreement (tuna and tuna-like species) and encouraging sustainable development of fisheries based on such stocks in the Indian Ocean and adjacent seas.

The scope of the fisheries and the stakeholders interest in the Indian Ocean tuna and tuna type species, is illustrated by the following breakdown of the key fleets operating on the high seas[2]:

- Industrial tuna purse seiners (target tropical tunas) from the EU, Seychelles, Iran, Japan and Thailand.
- Industrial coastal purse seiners (target neritic tuna species) from Thailand, Malaysia and
- Indonesia.
- Industrial deep-freezing longliners (target tuna or swordfish) from Taiwan, Japan, China, India.
- Industrial freezing longliners (target swordfish) from the EU and Australia.
- Fresh tuna longliners (target is tropical tunas, sharks or swordfish) from Indonesia, Malaysia, EU and Seychelles.
- Some gillnet (Iran, Pakistan) and baitboat (Maldives) vessels would also fall within this category.

Membership of IOTC is open to Indian Ocean coastal countries and to countries or regional economic organisations which are members of the United Nations or one of its specialised agencies and are fishing for tuna in the Indian Ocean. Current members are Australia, Belize, China, Comoros, Eritrea, European Community, France, Guinea, India, Indonesia, Iran, Japan, Kenya, Korea, Madagascar, Malaysia, Maldives, Mauritius, Mozambique, Oman, Pakistan, Philippines, Seychelles, Sierra Leone, Sri Lanka, Sudan, Tanzania, Thailand, United Kingdom and Vanuatu.

There are currently two Cooperating non-Contracting Parties to the IOTC - Senegal and South Africa who are not yet members of the IOTC.

The main functions of the IOTC are to keep under review the conditions and trends of the stocks and to gather, analyse and disseminate scientific information, catch and effort statistics and other data relevant to the conservation and management of the stocks and fisheries based on the stocks covered by the Agreement; and to encourage, recommend, and coordinate research and development activities in respect of the stocks and fisheries covered by the Agreement, and such other activities as the Commission may decide appropriate. Other areas of particular interest to the organisation include activities connected with transfer of technology, training and enhancement. In the discharge of all responsibilities, the IOTC will have due regard to the need to ensure the equitable participation of Members of the Commission in the fisheries and the special interests and needs of Members in the region that are developing countries.

### *1.4 Current state of affairs in the relevant sector*

Given the range in membership of the IOTC and the complexity of many of the issues at hand, the organisation maximises the opportunities presented by the internet for interactive communication with members and interested parties. As part of this approach, the IOTC is currently developing a new website taking into account the growing number of documents that need to be made available on the website and the new activities that require the website to be linked to several databases (vessel record, statistical documents for example). The objective of this new website is to make all information available in a simple way and to facilitate the navigation through the different sections of the website. One of the most important information that needs to be available on this website, are the different Conservation and Management

[2] Training Manual: Strengthening the implementation of the IOTC Port State Measures Resolution 10/11, ACP Fish II/IOTC, prepared by NFDS, May 2011

Measures (CMM), otherwise known as IOTC Resolutions, that have been adopted by the IOTC since 1998.

At the moment, the CMM are only accessible through a collection of all the CMM adopted since 1998 in a PDF format which is updated periodically. This document does not present the CMM in a searchable or easily accessible format for potential users. The new IOTC website would benefit from a dedicated section that will allow users to quickly browse, find and download IOTC Resolutions in various formats, by year, number or keyword. This resource will allow IOTC CPCs and other interested parties to follow more easily the evolution in the decisions of the Commission and also facilitate swift access to the CMM by those responsible, at the level of CPCs, for the implementation of obligations derived from the adopted CMM. Access to and awareness of the Resolutions are important pre-conditions for improved levels of compliance with the measures.

### *1.5 Related programmes and other donor activities*

The ACP Fish II Programme has provided support to the IOTC, under PE I (Project A6) for undertaking a study on the readiness of the legal framework of five countries (Kenya, Mauritius, Seychelles, Tanzania and Mozambique) to implement the IOTC Port State Measures resolution (PSMR). The Project also supported a training workshop for 15 participants from the five countries. The aim of the training workshop was provides a comprehensive approach towards implementing the IOTC PSMR to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fishing in the IOTC Area.

The IOTC has also sought, and received support from a project funded under the 10$^{th}$ European Development Fund for the Implementation of a Regional Fisheries Strategy (IRFS) of the Indian Ocean Commission (IOC), for developing an IOTC compendium of Resolutions and Recommendations. The outcome of this project is a list of current IOTC CMM that have been "cleaned" of the inconsistencies and redundancies; be it in the application of terminologies that are not applicable in the context of the IOTC or with regard to references to CMM that are no longer in force or have been superseded. A list of keywords from the existing CMM that could be used as classifying/searching criteria will also be produced as part of this assignment.

## 2. OBJECTIVE, PURPOSE & EXPECTED RESULTS

### *2.1 Overall objective*

The overall objective of the ACP Fish II Programme is to contribute to the sustainable and equitable management of fisheries in ACP regions, thus leading to poverty alleviation and improving food security in ACP States.

### *2.2 Purpose*

The purpose of this contract is to build the capacity of the IOTC Secretariat to support Member States in complying with the agreed Conservation and Management Measures.

### *2.3 Results to be achieved by the Consultant*

The Consultant will achieve the following results as part of this assignment:

1. Online database developed, populated with IOTC CMM adopted since 1998 and search interfaces operational;
2. Manual for database management and updating produced.

## 3. ASSUMPTIONS & RISKS

### *3.1 Assumptions underlying the project intervention*

The IOTC will make available all documents and statistics necessary for the consultancy and will allocate official resources and time to support the Consultant in the implementation of the

assignment. Similarly, it is assumed that the connections will be made between the KE for this assignment and the IT section in the IOTC and the company developing the new website so that the end product of this assignment is both closely in line with the needs of the IOTC and is technically compatible with the existing or future systems.

### *3.2 Risks*

No specific risks are foreseen for this assignment.

## 4. SCOPE OF THE WORK

### *4.1 General*

#### *4.1.1 Project description*

Recognising the importance of an accessible list of Conservation and Management Measures (CMM), this assignment will develop an online database to facilitate the searches of IOTC CMM by interested parties. The database itself will be linked to the IOTC website and accessible for all interested parties.

The early stage of the assignment will ensure that the KE is fully aware of the needs of both the IOTC and the users of the website and database and to this end remote consultations will be held with interested parties and detailed briefings will be made with the IOTC officers. The IOTC will ensure access to the IOTC collection of resolutions and recommendations in the most appropriate format.

The IOTC is in the process of developing a series of keywords to facilitate searches of the CMM and if this is completed by the time of the assignment, then it will be made available to the Consultant to assist in classifying and ultimately searching. It is important that during the development phase, the Consultant is aware of how the database will link with the new IOTC website and to this end the IOTC will facilitate contact between the ACP Fish II Consultant and the company contracted to the IOTC to design their new website.

The bulk of the assignment will involve the development of the searchable database for the CMM. The CMM database will include, among other things, their reference (number), year of adoption and keywords, and if the CMM was superseded, the superseding Resolution number. This will require separation of the IOTC CMM (in PDF format) from the IOTC Collection of Resolutions including the text of the separate resolutions and recommendations, as well as their year, number and some keywords. The Consultant will work with IOTC Secretariat to develop a series of keywords and references that will be used to characterize the entries and facilitate searches. The user interface developed should follow the standards of the IOTC website and would need to be done in partnership with the company managing the website.

A Technical Team (TT) will be established under the guidance of the IOTC, to guide and support the implementation of this assignment and ensure that adequate preparations are made for the long term utilization of the database. The exact composition and activities of the TT will be agreed at the time of the initial briefing.

The ICCAT has already such a module at its website (http://www.iccat.int/en/RecsRegs.asp) which could be used as a reference for this project. The database will have user-friendly interfaces to facilitate searches by interested parties. A comprehensive manual will be prepared by the Consultant for operation and maintenance of the database with guidance for the updating of the system or any later fine-tuning.

#### *4.1.2 Geographic area to be covered*

The project will cover member states of IOTC.

#### *4.1.3 Target groups*

Target groups for this assignment are the officers of the IOTC Secretariat based in Seychelles.

### *4.2 Specific activities*

#### *4.2.1. Specific activities*

The Consultant will undertake the following activities:

1. Be briefed by ACP Fish II programme and IOTC;
2. Meet with Technical Team established by the IOTC, conduct background literature review and analysis to enable an assessment of the information sharing activities and communication requirements of the IOTC;
3. Prepare detailed work plan and submit to target group and RFU in Kampala and Mozambique;
4. Create a database of all IOTC CMMs;
5. Define, together with the IOTC Secretariat, a short list of keywords that would be used to characterize each CMM (e.g. tuna, billfish, by-catch, statistics, IUU);
6. Make provisions in the database for indexing the contents of CMM in the system so as to facilitate search of content by users;
7. Populate the database with IOTC CMM adopted since 1998;
8. Design and create user-friendly interfaces integrated into the (new) IOTC website for easy online access to the CMMs;
9. Develop a manual for adding and updating CMMs to the database.

#### *4.2.2. Communication and project visibility*

a) ACP FISH II projects should follow the EU requirements and guidelines for communication and visibility available on the Programme website at http://acpfish2-eu.org/index.php?page=templates&hl=en. The CU will provide ACP FISH II templates for various communication products.

b) When validation workshops (where technical documents are presented to stakeholders for validation) are needed, given their importance for disseminating the results of the Project and ACP FISH II Programme the following activities will be requested:

   1) The Consultant will provide all necessary information in press-release style ("information note") on the project objectives and results, the activities to undertake, the main axes or strategic goals proposed and the future role of the beneficiaries.

   2) The Fisheries Administrations will receive the information note at least 3 days before the workshop, through their Government communication/press bodies or officials, in order to mobilise local media and to assure full coverage of the event. Financial support to media coverage is included in the "Incidental Expenditure". Receipt(s) of the incurred cost for media coverage will be required to verify the costs incurred.

c) The consultant will provide photographic record of the workshop activities

### 4.3 Project management

#### *4.3.1 Responsible body*

The Coordination Unit (CU) of the ACP Fish II Programme, based in Brussels, on behalf of the ACP Secretariat is responsible for managing the implementation of this assignment.

#### *4.3.2 Management structure*

The ACP Fish II Programme is implemented through the CU in Brussels and six Regional Facilitation Units (RFUs) across the ACP States. The RFU in Kampala, Uganda, covering ACP Member States in eastern Africa Region will closely supervise the implementation of this intervention and equally monitor its execution pursuant to these Terms of Reference. The RM for eastern Africa will liaise closely with the RM for Southern Africa in Maputo, Mozambique. For the purposes of this assignment, the ACP Fish II Programme Coordinator will act as the Project Manager.

All contractual communications including requests for contract modifications or changes to the Terms of Reference during the execution period of the contract must be addressed with a formal request to the CU and copied to the RFU. Beneficiaries' support for these changes is required.

#### *4.3.3 Facilities to be provided by the Contracting Authority and/or other parties*

Not applicable

## 5. LOGISTICS AND TIMING

### 5.1 Location

The place of posting will be the headquarters of the Indian Ocean Tuna Commission in Victoria, Seychelles.

### 5.2 Commencement date & Period of implementation

The intended commencement date of this assignment is June, 1st 2012 and the period of implementation of field activities will be two (3) months from the date of signature of the contract. Please refer to Articles 4 and 5 of the Special Conditions for the actual commencement date and period of implementation.

## 6. REQUIREMENTS

### 6.1 Personnel

#### *6.1.1 Key experts*

All experts who have a crucial role in implementing this assignment are referred to as key experts. Their profiles are described as follows:

**Key Expert 1: Software programmer**

*Qualifications and skills*

- A degree or equivalent in Information Technology and/or Information Management
- A high level of proficiency in written and spoken English; command of French desirable.

*General professional experience*

- Minimum 5 years' experience in database design and web applications, with track record of successful online database design activities.
- Familiar with the Drupal content management system (CMS)

*Specific professional experience*

- Good knowledge in SQL and DBMS such as MySQL
- Preferably previous experience in the region

There will be no missions outside the normal place of posting requiring overnights for this expert. There may be in-country field visits outside the normal place of posting not requiring overnights for this expert.

**Indicative number of working days by expert and task**

| No. | Indicative Task | Key Expert 1 (Days) |
|---|---|---|
| 1.1 | Briefing by ACP Fish II and IOTC | 1 |
| 1.2 | Review of existing systems and target group requirements | 5 |
| 1.3 | Database development | 20 |
| 1.4 | Manual development | 3 |
| 1.5 | Report preparation | 3 |
| | **Total** | **32** |

***Additional information***

a) The Key Expert is expected to spend at least 90 % of the total indicative number of working days in the Seychelles;

b) Note that civil servants and other staff of the public administration of the beneficiary country cannot be recruited as experts, unless prior written approval has been obtained from the European Commission.

c) The Consultant must complete a timesheet using the ACP Fish II template provided by the CU at the start of the implementation period. The Consultant is entitled to work a maximum of 6 days per week. Mobilisation and demobilisation days will not be considered as working days. Only in case of travel for mobilisation longer than 24 hours, the additional days spent for mobilisation will be considered as working days.

### *6.1.2 Other experts*

No other experts will be recruited under this assignment.

### *6.1.3 Support staff & backstopping*

Backstopping costs are considered to be included in the fee rates of the experts.

## 6.2 Office accommodation

Office accommodation for the Consultant will be provided by the IOTC Secretariat.

## 6.3 Facilities to be provided by the Consultant

The Consultant shall ensure that expert is adequately supported and equipped (transport, laptop, printing services, internet and appropriate communication tools). In particular it shall ensure that there is sufficient administrative, secretarial and interpreting provision to enable experts to concentrate on their primary responsibilities. It must also transfer funds as necessary to support its activities under the assignment and to ensure that its employees are paid regularly and in a timely fashion.

If the Consultant is a consortium, the arrangements should allow for the maximum flexibility in project implementation. Arrangements offering each consortium member a fixed percentage of the work to be undertaken under the contract should be avoided.

The Consultant will provide all the software and hardware required for the KE to complete the task.

## 6.4 Equipment

**No** equipment is to be purchased on behalf of the Contracting Authority or beneficiary country as part of this service contract or transferred to the Contracting Authority or beneficiary country at

the end of the contract. Any equipment related to this contract which is to be acquired by the beneficiary country must be purchased by means of a separate supply tender procedure.

### 6.5 Incidental expenditure

The Provision for incidental expenditure covers the ancillary and exceptional eligible expenditure incurred under this contract. It cannot be used for costs which should be covered by the Consultant as part of its fee rates, as specified above. Its use is governed by the provisions in the *General Conditions* and the notes in Annex V of the contract. It covers:

a) KEY EXPERTS

- Travel costs and subsistence allowances (per diems) for missions, outside the normal place of posting and requiring overnights, to be undertaken as part of this contract.
- Travel costs for field visits for the Key Experts (car or boat rental, fuel and domestic flights or other appropriate means of transport).

b) WORKSHOP/TRAINING/CONSULTATIONS ORGANISATION

- The cost of venue (if needed) and lunch for consultations of less than one day with locally-based participants.

c) FUNDING OF NATIONAL ADMINISTRATION/REGIONAL FISHERIES BODIES OFFICERS ACCOMPANYING KEY EXPERTS ON MISSIONS

**Exceptionally**, the cost of flights, accommodation and meals for the representatives of fisheries administrations or regional fisheries bodies who may accompany the Key Experts on regional or national missions under the following conditions:

i) Request of a prior approval to the CU, **attaching to this request the declaration issued by** fisheries administrations or regional fisheries bodies **stating that the cost of this extra activity for their officers cannot be covered given the internal budget restrictions. The IOTC should acknowledge, despite this, the need of the attendance of its officer for effective project implementation.**

ii) The total cost for accommodation and meals based on actual cost (invoices to be provided) cannot exceed the EU per diem rate for the country.

iii) If private or administration's means of transport are used by the representatives of the fisheries administrations or regional fisheries bodies accompanying the Key Experts on national missions, fuel cost will be reimbursed upon receipt of the officer's reimbursement request based on distance travelled and local price for fuel per unit.

d) OTHER

i) None

The Provision for incidental expenditure for this contract is **EUR 4.000.** This amount must be included without modification in the Budget breakdown.

### 6.6 Expenditure verification

The Provision for expenditure verification relates to the fees of the auditor who has been charged with the expenditure verification of this contract in order to proceed with the payment of further pre-financing instalments if any and/or interim payments if any.

The Provision for expenditure verification for this contract is **1,000 EUR**. This amount must be included without modification in the Budget breakdown. This provision cannot be decreased but can be increased during the execution of the contract.

## 7. REPORTS

### 7.1 Reporting requirements

Please refer to Article 26 of the General Conditions. There must be a final report, a final invoice and the financial report accompanied by an expenditure verification report at the end of the period of implementation of the tasks. The approved Final Technical Report (FTR) must be annexed to the Final Report (FR). The final report must be submitted to the CU after receiving the approval of the Final Technical Report (FTR).

The Final Report (FR) shall consist of a narrative section and a financial section. The financial section must contain details of the time inputs of the experts, of the incidental expenditure and of the provision for expenditure verification.

To summarise, the Consultant shall provide the following reports:

| Name of report | Content | Time of submission |
|---|---|---|
| Inception Report | Analysis of existing situation and plan of work for the project. | No later than 10 days after the Key Expert arriving in the place of posting for the first time. |
| Draft Final Technical Report | Description of achievements, problems encountered, recommendations and technical proposals suggested by the consultant, including all key outputs as annexes to the main report (e.g. manuals). | Within one week of the expert leaving the country on conclusion of the assignment. |
| Final Technical Report | Draft FTR taking into account changes and comments from the IOTC, RFU and CU. | Within 10 days after receiving comments on the Draft Final Technical report (DFTR). If no comments on the report are given within 14 days, the draft FTR shall be considered as the FTR. |
| Final Report | Short description of achievements including problems encountered and recommendations and suggestions; together with the Final Technical Report and a final invoice and the financial report accompanied by the expenditure verification report. | After receiving the approval of the Final Technical Report (FTR). |

The formats of technical reports are available on the ACP FISH II web site at http://acpfish2-eu.org/index.php?page=templates&hl=en. All technical reports must follow the requested templates.

### 7.2 Submission & approval of reports

Two copies of the approved Final Technical Report must be submitted to the Project Manager identified in the contract (CU), one copy to the RFU and two copies to the IOTC. The Final Technical Report must be written in English. The Project Manager is responsible for approving this report. The cost of producing such material will be included in the fees.

## 8. MONITORING AND EVALUATION

### 8.1 Definition of indicators

The results to be achieved by the Consultant are included in Section 2.3 above. Progress to achieving these results will be measured through the following indicators:

i. Quality of experts fielded as shown by demonstrated skills and expertise

ii. Speed of mobilisation to the beneficiary country will indicate a positive start of the assignment;

iii. Identification of methodology, issues and problems as recorded in the Inception Report;

iv. Nature and usability of database developed;

v. Quality and accessibility of the Manual prepared to support the database;

vi. Number and nature of comments received on the Draft Final Technical Report;

The Consultant may suggest additional monitoring tools for the contract duration.

### 8.2 Special requirements

Not applicable.

Annex 2: Inception Report

# Inception Report

## DEVELOPMENT OF AN ONLINE DATABASE FOR THE INDIAN OCEAN TUNA COMMISSION (IOTC) CONSERVATION AND MANAGEMENT MEASURES

**Project ref. N° EA-5.2-B22**

**Region: East Africa**
**Country: Seychelles**

**August 3, 2012**

**Assignment by:**

AGORA 2000

**Team Leader: Mr Stefano PIREDDA**

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## ACRONYMS & ABBREVIATIONS

| | |
|---|---|
| **ACP** | African, Caribbean and Pacific Group of States |
| **ADB** | African Development Bank |
| **ASWAp** | Agriculture Sector Wide Approach |
| **BVCs** | Beach Village Committees |
| **CAS** | Catch Assessment Survey |
| **CPUE** | Catch Per Unit Effort |
| **CSS** | Cascading Style Sheet |
| **DOF** | Department of Fisheries |
| **CU** | Coordination Unit |
| **EIA's** | Environmental Impact Assessments |
| **EU** | European Union |
| **FAO** | Food and Agriculture Organisation |
| **FP** | Fisheries Policy |
| **FX** | Foreign Exchange |
| **HACCP** | Hazard Analysis and Critical Control Point |
| **HIV/AIDS** | Human immunodeficiency virus / Acquired immune deficiency syndrome |
| **IT** | Information Technology |
| **IUU** | Illegal Unreported Unregulated, |
| **KE** | Key Expert |
| **KOBWA** | Komati Basin Water Authority |
| **LMDA** | Lake Malawi Development Authority |
| **MNFAP** | Malawi National Fishery and Aquaculture Policy |
| **MTF** | Malawi Traditional Fisheries |
| **NGOs** | Non-Governmental Organisations |
| **ORT** | Other Recurrent Transactions |
| **QC** | Quality Control |
| **SACU** | Southern African Customs Union |
| **SADC** | South African Development Community |
| **SMART** | Specific, Measurable, Attainable, Relevant and Time bound |
| **UI** | User Interface |

# INTRODUCTION

This report is the conclusion of two weeks of intensive work and reflexions with the IOTC team based in Victoria, Mahé (Seychelles) especially with Dr David Wilson (Deputy Secretary & Science Manager) and Mr Olivier Roux (IT Consultant). Out of the usual discussions and analysis of documents, the main objectives was to detail the context in which the application would be developed and also to detail the specific expectations expressed in the ToR.

This report lists the documents, provided by the IOTC, reviewed and analysed, the various issues already solved or to be resolved in the next weeks, as well as the few changes conducted in the ToR. This report will also detail the approach as well as the description of the work plan (timetable and manning schedule) to conduct this project until its completion.

# 1. SHORT BACKGROUND

Tuna and tuna-like fishes are among the migratory fisheries species. They move constantly in search for food, for seasonal movements and often over long distances. Therefore, tunas are among the species for which international cooperation is crucial to ensure conservation and management. Regional Fisheries Management Organizations (RFMOs) represent the main instrument for cooperation among the countries. There are five tuna RFMOs, covering different regions, among which the Indian Ocean Tuna Commission.

**The area of competence of the IOTC** is the Indian Ocean and adjacent seas, north of the Antarctic Convergence, covered for the purpose of conserving and managing stocks that migrate into or out of the Indian Ocean. Membership is opened to Indian Ocean coastal countries and to countries/regional economic organisations that are members of the United Nations (or one of its specialised Agencies) and are fishing for tuna in the Indian Ocean.

The IOTC is maximising the opportunities offered by the internet and instruments for interactive communication, given its wide membership and the complexity of many of the issues at hand. As part of this process, **the IOTC has commissioned the development of an enhanced version of its website** (which will be linked to several databases, e.g. vessel record and statistical documents) **to Maven, a web agency based in Seychelles.**

One of the information that needs to be available on the website is the different **Conservation and Management Measures (CMMs)**. To date, the IOTC CMMs can be accessed through a collection of all the measures adopted since 1998 in a PDF document which is periodically updated. The current format of the document, does not allow for a structured consultation of the measures, which are not easily searchable and thus accessible to potential users.

This project is aimed at achieving the following expected results:

- **Online database developed and populated with IOTC CMM since 1998, and search operational interfaces;**
- **Manual for database management and updating produced.**

# 2. COMMENTS ON THE TERMS OF REFERENCE

Most of the ToR remain valid but a few changes were made to the original document. To recall :

*"The Consultant will undertake the following activities:*

- *Be briefed by ACP Fish II programme and IOTC;*
- *Meet with Technical Team established by the IOTC, conduct background literature review and analysis to enable an assessment of the information sharing activities and communication requirements of the IOTC;*
- *Prepare detailed work plan and submit to target group and RFU in Kampala and Mozambique;*
- *Create a database of all IOTC CMMs;*
- *Define, together with the IOTC Secretariat, a short list of keywords that would be used to characterize each CMM (e.g. tuna, billfish, by-catch, statistics, IUU);*
- *Make provisions in the database for indexing the contents of CMM in the system so as to facilitate search of content by users;*
- *Populate the database with IOTC CMM adopted since 1998;*
- *Design and create user-friendly interfaces integrated into the (new) IOTC website for easy online access to the CMMs;*
- *Develop a manual for adding and updating CMMs to the database."*

Point 7 is no longer valid.

Due to the reduced timescale during which the project has to be completed, CMMs will be provided by the IOTC itself. However most of the 2012 CMMs will be added to the database by the KE as they will be used as examples during the training session.

Point 8 is related to Maven's graphical work.

Designing and creating UIs are subjected to prior study and graphic proposals. Since Drupal has its own user interface and since a graphic design template has already been approved by the IOTC for their new website, the same CSS classes, graphic layouts and PHP templates will be used for the user interface. This will concern the following:

- web page that provide the access to the two search engines
- web page for the BASIC search engine
- web page for the ADVANCE search engine
- web page for displaying the CMM.

However mock-ups will be provided to validate the structure of those pages and they will be part of the Technical Specifications.

No other modification has been added to the initial ToR.

# 3. APPROACH AND METHODOLOGY

Four steps were established for the **Needs Assessments** phase (also defined as Phase I). They have been very well conducted thanks to the full participation of the IOTC as well as the Maven web agency. To recall, those steps were :

(1) Needs Brief with ACP Fish II CU & IOTC and Establishment of Technical Team (TT),

(2) Coordination with TT and background literature review,

(3) Preparation of SWOT, Analysis & detailed Work Plan,

(4) Drafting of the DB structure.

The main objective during this first phase was to obtain all the information needed, and to have a clear overview of what the IOTC really needs in term of database structure, features for both administrators/editors and web users as well as training session. It was also important to analyse Maven's work: how they were working, how was the new website database structured, what was the modules involved, etc.

The following phases are (II) **Database development, population & coordination with website** and (III) **Preparation of Manual and Sustainability**.

## 3.1 Phase II: Online database developed and populated with IOTC CMM since 1998, and search of operational interfaces

### 3.1.1 Writing UI Technical Specifications

Before starting any development, we need to ensure that IOTC's needs have been well identified during the Need Assessments phase. We have to minimise any misunderstandings in results expectations. To do so, a **Technical Specifications Draft** has been already written (see annex 2) and will need to be improved and approved by the IOTC staff.

***Important note***

*Any improvement or modification of the **Technical Specifications Draft** during the development will be reported to keep up-to-date and will may impact the schedule presented in this IR.*

### 3.1.2 Writing Database Technical Specifications

To establish the best possible database structure, a database **Technical Specifications Draft** will be written as part of the main documentation delivered at the end of the project.

***Important note***

*Any improvement or modification of the **Technical Specifications Draft** during the development will be reported to keep up-to-date and will may impact the schedule presented in this IR.*

### 3.1.3 Setting up a local development environment

All development environments will use Apache/2.2.21 (Win32) with PHP 5.3. and MySQL 5.0.8.

Current IOTC @ Web.com environment is based on Apache/2.2.3 (Red Hat) with PHP Version 5.2.17 and MySQLi 5.0.95. This shouldn't be on any kind a problem as Drupal is both fully stable on the two versions of PHP.

**Setting up the SANDBOX**

A sandbox is used for testing and help developing code and runs unit test, integration tests and re-factors before putting it into the main build (cfr. The staging server). A sandbox replicates at least the minimal functionality of the IOTC website needed to accurately test the programs or other code under development (e.g. usage of the same environment variables as, or access to an identical database to that used by, the stable prior implementation intended to be modified).

**Setting up the MIRRORING server**

The MIRRORING server is a replica of the actual web.com server that is hosting the new IOTC website, and will use exactly the same Drupal modules (and modules version) and user content (files, folders, etc.). To create a MIRRORING server, a complete backup of the actual database and the files is used.

**Setting up the STAGING server**

A STAGING server will be based on a copy of the replica already created. This STAGING will be accessible at any time inside the IOTC network thru a static IP. This server is used to test the new or revised web pages before they are made live (live means "the live website in the PRODUCTION server").

### 3.1.4 Configuring Drupal and its modules

According to the technical environment of the IOTC new website and the CMMs application requirements, a list of contributed modules will be established to be installed. Each contributed module will be verified in order to ensure full compatibility with the other modules already in used for the other features of the website (meeting, documents, vessels...). By contributed module, we mean "module that has been developed by the Drupal community". Priority will be given to modules that are actively maintained by the community. This will improve the sustainability of the application.

***Important Note***

*It is very important to clearly verify each module as they shouldn't interfere with Maven's work. The Seychelles web agency will be clearly informed in order to apply any changes needed to integrate the new CMM database and application.*

### 3.1.5 Developing the application management tools

**Internationalization Configuration**

This module has already been installed by Maven and will be used to manage French and English languages for the content, for the fields and for the taxonomy terms.

**Taxonomy Structure**

Taxonomy is for categorizing contents. By term we mean "keyword". Terms are grouped into vocabularies. For example, a vocabulary called "Fruit" would contain the terms "Apple" and "Banana". Vocabularies will be used as filters for both BASIC and ADVANCE search tools.

The first part of this development will be about creating the vocabularies that are going to be used in the content creator (to create/edit/delete any CMMs) and in the webpages.

Each taxonomy will be created and fed with terms provided by the IOTC. Of course, the administrator will have the opportunity to change (create/edit/delete) those terms at any time since this is part of standard Drupal features.

**CMM Content Creator**

The Administrator/Editor UI inside Drupal will be developed in accordance with the technical specifications as follows :

- creating new users, roles and permissions *(to be provided by Maven)*;
- adding a content type for the CMM content (resolution or recommendation, see ANNEX 3) with all the required fields and how they are going to be displayed in the web page and the administrator creation page;
- adding online help for each fields *(to be provided by the IOTC)*;
- creating the CSS classes which have not been created by Maven yet;
- creating the default webpage to generate a CMM individual result webpage.

**BASIC Search Views**

The module Views will be used in conjunction with Drupal native Taxonomy structure to create the different search filters. Those filters will be still accessible by the administrator at any time for future improvements. A main View will be created to display the BASIC Search tool. Other Views will need to be created to display the results list page, the export function of each type of file (XLS, DOC …).

**ADVANCE Search Views**

This View will be a replica of part of the BASIC Search View (in term of filters) but it will still remain a separate search tool since the display of the results list is very different. This will offer the opportunity to improve the ADVANCE Search tool in the future without affecting the BASIC Search tool. A main View will be created to display the ADVANCE Search tool. Other Views will have to be created to display the results list page, the export function of each type of file (XLS, DOC …).

### 3.1.6 Creating and designing the web pages for the users

Five webpages will be created and designed in accordance with existing design layouts (see ANNEX 4) and typical RFMOs projects, which are :

- the webpage that gives the access to the two search tools
- the BASIC search webpage with its related results list and filters
- the ADVANCE search webpage with its related results list, filters and search box
- the exports webpages to generate the XLS, DOC, etc. files to download
- the CMM webpage that will display a CMM individual result

The creation and design of the webpages will be done in two distinct stages. All the CSS classes will be adapted from the current CSS classes already in use in the new IOTC website and will respect the new graphic design (see. Annexes 4)

### 3.1.7 Delivering backup and documentations

A backup of all the KE work will contain the database and all the Drupal files (previously retrieved from the FTP server on 19th July 2012). A document will be delivered explaining how to set up this website in a fresh environment server.

***Important note***

*It will be necessary to operate a merge between this website with the CMM application and the future release of Maven 's IOTC website. This task will have to be scheduled later on year 2012.*

## 3.2 Phase III: Manual for database management and updating produced

### 3.2.1 Implementation of the online help related to Drupal fields

Each field (taken from a selection made by the IOTC staff) will be supplemented by textual aids provided by the KE and/or IOTC.

### 3.2.2 Drupal management and updating manual draft (PDF)

A manual will explain how to create/edit/delete a CMM or a taxonomy in both English and French. This manual is not intended to provide any instructions on how to use all other features of Drupal as this is not part of the assignments of the KE.

### 3.2.3 1-day training

A 1-day editor training on how to create/edit/delete a CMM or a taxonomy term in both English and French will be delivered for the IOTC team. This training is aimed to be scheduled on 15th August 2012.

Depending of IOTC needs, another technical training of 1 or 2 days could be held about how Drupal is working (how to take care of the configuration, updates, modules, database …).

# 4.SET UP AND MEMBERS OF THE TECHNICAL TEAM

No Technical Team will be set up. The full project is managed and developed by the same KE as part of his mission. Maven's participation is highly expected but not required.

# 5.PROPOSED WORK PLAN

The global Timetable & Manning Schedule defined in the Technical Offer has been modified. The initial contract term was based on a 20 working days for Phase II, which has been reduced (due to delay in Phase I which was extended to 5 more days) to 15 working days.

***Important Note***

*Any delay in the validation of documents, major advances that require validation or in obtaining lists of terms (keywords) will impact immediately this calendar.*

During each phase and milestone, the IOTC will have the opportunity to control and verify the developments made. The STAGING server will be accessible at any time on a static IP address that the IOTC will deliver to the KE.

| Phase / Activities | JULY | | | | AUGUST | | | |
|---|---|---|---|---|---|---|---|---|
| | 07-09 | 07-16 | 07-23 | 07-30 | 08-06 | 08-13 | 08-20 | 08-27 |
| **PHASE 1 : Inception and Needs Assessment** | | | | | | | | |
| Mobilisation of the Expert | X | | | | | | | |
| Brief by ACP Fish II programme and IOTC | X | | | | | | | |
| Meet with the Technical Team established by the IOTC | X | | | | | | | |
| Background literature review and analysis | X | | | | | | | |
| Redefinition of the intervention strategy and prepare Work Plan | X | | | | | | | |
| New IOTC website analysis (server conf. + Drupal + MySQL) | X | X | | | | | | |
| Writing UI Technical Specifications | X | X | | | | | | |
| Writing Database Technical Specifications | | X | X | | | | | |
| **PHASE 2 : Database development** | | | | | | | | |
| Configuring Drupal and its modules | | | X | X | | | | |
| Developing the application (back office) | | | | X | X | X | | |
| Creating the web pages for the users (front office) | | | | | X | | | |
| Designing the web pages for the users | | | | | X | | | |
| Delivering the application | | | | | X | | | |
| **PHASE 3 : Manual development** | | | | | | | | |
| Implementation of the online help related to Drupal fields | | X | X | X | X | X | | |
| Drupal management and updating manual draft (PDF) | | | | | | X | | |
| 1 day training *(currently scheduled on August 14)* | | | | | | X | | |
| PHASE 4: Reporting and Project closure | | | | | | | X | X |

## 6. RESULTS OF THE INITIAL DOCUMENT REVIEW

Two types of documents have been provided by the IOTC to the KE : the CMMs PDF document and some new Technical Specifications written by Olivier ROUX.

**CMMs documents**

- 6 superseded CMMs (English, PDF)

- 12 individual active CMMs recommendations (English, PDF)
- 49 individual active CMMs resolutions (English, PDF)
- 4 collections of active CMMs (French + English, PDF)

Those documents were essentials to establish a CMM structure inside Drupal and MySQL.

**Requirements and specifications**

- CMM web app search (written by Olivier ROUX and conducted by Dr David Wilson)
- 10+ mock-ups (created under Balsamiq by Olivier ROUX)

Those documents were written in week N°2 of this project, and this led to a delay in initiating the phase II of this project.

***Important Notification***

*Any document was provided by Maven explaining the database structure, the Drupal structure, content organization and categorization, etc. This has been resulted in the need for a complete analysis of the site currently online, which explains the delay.*

# 7. KEY ISSUES TO BE ADDRESSED/SOLVED

From discussions and interviews conducted during two weeks (10 working days), the last key issues to be addressed are as follows:

**Concerning the Hosting provider "Web.com"**

The site is currently hosted by Web.COM. This accommodation does not offer enough quality at present: the recovery of any data via FTP or from databases are particularly slow or impossible, and this leads to a consumption of resources in times for the KE, the IOTC and Maven's company.

It has been therefore decided to find another hosting provider as soon as possible. As it is very related to the KE work, he has been invited to participate in this research. Indeed, the CMF Drupal requires a specific server configuration. All data, files and websites should be transferred during August but no one responsible has been assigned to this task yet. It is not possible so far to estimate the impact this might have on the current schedule of the project.

**Concerning the Web agency "Maven Seychelles"**

Maven is a communication company based in Seychelles, and is currently developing the new IOTC website based on Drupal 7 in which the CMMs database has to be implemented.

Three main problems emerged during the Inception Phase :

- IOTC new website was supposed to be finished before any addition of new applications like the one intended for CMMs, therefore the KE is about adding a new application to an "under construction" website. This can be critical when we are talking about a CMS/CMF like Drupal, as many of the modules and their configurations will be also used by the CMM database application.

- Maven's developer works directly on the production server (the one online) instead of a local staging server. The website online is therefore in a unstable state and/or configuration.

- Maven cannot provide any backup of their own work, nor any technical documentations.

Those problems have a direct impact on phase II, as the CMMs database and UI for both administrators, editors and internet users have to be developed “inside” this Drupal website. To solve this situation, three options were discussed with both IOTC and Maven during Week N°2 :

- Option N°1 : This first KE proposition was about asking Maven to stop any development during the next 3 weeks. It was truly the best option to take, but unfortunately this solution has been refused by Maven.

- Option N°2 : Maven's proposition was to invite the KE to develop the new CMM application directly inside the website currently online on the PRODUCTION server. This option was immediately rejected by the KE. The development of a new application has to be done on a STAGING server, then tested and stabilized before being put online on the PRODUCTION server.

- Option N°3 **(retained option) :** This option is about to develop the new CMM application in a STAGING server, to be merged as soon as Maven finalizes IOTC new website. This is a fully-secure solution even if this could impact the initial contract terms (in term of working days and activities). Indeed it will be necessary to do a merge between one version of the new site (with the new CMMs database and features) and a new up-to-date version of the new website still under construction during July and August.

**This merging will take about 2 working days to be completed, tested and installed online**. It is better to achieve this merging when the new website will be fully finalize and stable

Annex 3: Technical Documentation

# Technical Documentation

## DEVELOPMENT OF AN ONLINE DATABASE FOR THE INDIAN OCEAN TUNA COMMISSION (IOTC) CONSERVATION AND MANAGEMENT MEASURES

**Project ref. N° EA-5.2-B22**

**Region: East Africa**
**Country: Seychelles**

**August 24, 2012**
**Written by Stefano PIREDDA**

**Assignment by:**

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# 1. PREVIOUS CONFIGURATION SETTINGS *without the CMM DB Application*

The new IOTC website developed by Maven Seychelles company is running under Drupal 7.

This is the original configuration of the website before being updated with the CMM Database Application.

## 1.1 Requirements

To run a Drupal 7 website you need the system requirements below.

| | *Requirements* | *Web.Com (IOTC's Provider)* |
|---|---|---|
| **PHP** | Drupal 7: PHP 5.2.5 or higher (5.3 recommended). For Drupal 7, versions of PHP 5.2.4 that include back ported security patches also meet the requirements. The PHP version included with Ubuntu 8.04 is the most common example of this. | PHP Version 5.2.17 **(17 > 4 so this is ok)** |
| **Apache** | Drupal will work on Apache 1.3 or Apache 2.x hosted on UNIX/Linux, OS X, or Windows. The majority of Drupal development and deployment is done on Apache, so there is more community experience and testing performed on Apache than on other web servers. | Apache/2.2.3 (Red Hat) **(this is ok)** |
| **MySQL** | Drupal 7 will only support MySQL 5.0.15 or higher, and requires the PDO database extension for PHP (see What is PDO?). | MySQL 5.0.95 **(this is ok)** |

## 1.2 Modules

### Core Modules

Core modules are activated except: aggregator, blog, book, comment, forum, openID, poll, statistics, syslog, testing, tracker. This is a standard configuration for this kind of website.

The Drupal core will have to be updated to its latest version.

### Contrib modules

Most of the modules are active *but* 23 modules are not up-do-date. It is necessary to release a production website based on the most up-to-date modules especially for beta or development modules.

| | |
|---|---|
| **Content Access** 7.x-1.2-beta1 | http://drupal.org/project/content_access Yet another content access module. This module allows you to manage permissions for content types by role and author. It allows you to specifiy custom view, edit and delete permissions for each content type. Optionally you can enable per content access settings, so you can customize the access for each content node. |

| | |
|---|---|
| **Backup and Migrate**<br>7.X-2.4 | http://drupal.org/project/backup_migrate<br>Backup and Migrate simplifies the task of backing up and restoring your Drupal database or copying your database from one Drupal site to another. It supports gzip, bzip and zip compression as well as automatic scheduled backups. |
| **CCK**<br>7.x-1.0 (9 sub modules) | http://drupal.org/project/cck<br>The Content Construction Kit allows you to add custom fields to nodes using a web browser. |
| **Clientside validation**<br>7.x-1.26 (6 sub modules) | http://drupal.org/project/clientside_validation<br>This module adds clientside validation (aka "Ajax form validation") for all forms and webforms using jquery.validate. It is related with the webforms. |
| **Context**<br>7.x-3.0-beta2 not active | http://drupal.org/project/context<br>Provide modules with a cache that lasts for a single page request. |
| **Date**<br>7.x-2.1 (11 sub modules) | http://drupal.org/project/date<br>Makes date/time fields available. |
| **Devel** | http://drupal.org/project/devel<br>Development tools that had no functionality for the website. Only for programmers. |
| **Display suite**<br>7.x-1.5 (4 sub modules) | http://drupal.org/project/ds<br>Display Suite allows you to take full control over how your content is displayed using a drag and drop interface. Arrange your nodes, views, comments, user data etc. |
| **Content Taxonomy**<br>7.x-1.0-beta1 (3 sub-modules) | http://drupal.org/project/content_taxonomy<br>Extends the Taxonomy Reference Fields |
| **Entity Reference**<br>7.x-1.0-beta4 (2 sub-modules) | http://drupal.org/project/entityreference<br>Provides a field that can reference arbitrary entities. |
| **FileField Sources**<br>7.x-1.4 | http://drupal.org/project/filefield_sources<br>FileField Sources is an extension to the FileField module. The FileField module lets you upload files from your computer through a CCK field. |
| **Node Reference Create**<br>7.x-1.0 | http://drupal.org/project/noderefcreate<br>Node Reference Create is an enhancement to the nodereference auto-complete widget that allows users to reference non-existent nodes. |
| **References**<br>7.x-2.0 (3 sub modules) | http://drupal.org/project/references<br>This project provides D7 versions of the 'Node reference' and 'User reference' field types, that were part of the CCK package in D6, at functional parity with the D6 counterparts. |
| **Hierarchical Select**<br>7.x-3.0-alpha5 (6 sub modules)<br>not active | http://drupal.org/project/hierarchical_select<br>Simplifies the selection of one or multiple items in a hierarchical tree. |
| **Filter Transliteration**<br>7.x-1.1<br>not active | http://drupal.org/project/filter_transliteration<br>Provides a text format filter for converting non-latin text to US-ASCII. |
| **Mail System**<br>7.x-2.31 | http://drupal.org/project/mailsystem<br>Provides a user interface for per-module and site-wide mail_system selection. |
| **Mime Mail**<br>7.x-1.0-alpha1 (3 sub modules) | http://drupal.org/project/mimemail<br>Provides a class for creating MIME messages. |

| | |
|---|---|
| **Simplenews**<br>7.x-1.0-beta2 (2 sub modules) | http://drupal.org/project/simplenews<br>Simplenews publishes and sends newsletters to lists of subscribers. |
| **File entity (for media)**<br>7.x-2.0-unstable3 | http://drupal.org/project/file_entity<br>Extends Drupal file entities to be fieldable and viewable. |
| **Language icons**<br>7.x-1.0-beta1 | http://drupal.org/project/languageicons<br>Adds icons to language links. |
| **Internationalization**<br>7.x-1.4 (15 sub modules) | http://drupal.org/project/i18n<br>Extends Drupal support for multilingual features. |
| **Open Layers**<br>7.x-2.0-beta1 | http://drupal.org/project/openlayers<br>OpenLayers base API module<br>Note : The OpenLayers Module and its submodules bring the OpenLayers JS library into Drupal. They enable users to combine maps from different map providers with data from Views and CCK input. |
| **Echo**<br>7.x-1.8 | http://drupal.org/project/echo<br>Wraps content in a themed webpage and returns it as text. |
| **Entity API**<br>7.x-1.0-rc1 (2 sub-modules) | http://drupal.org/project/entity<br>This module extends the entity API of Drupal core in order to provide a unified way to deal with entities and their properties. Additionally, it provides an entity CRUD controller, which helps simplifying the creation of new entity types. |
| **Geofield**<br>7.x-1.0-rc1 (2 sub-modules) | http://drupal.org/project/geofield<br>Stores geographic and location data (points, lines, and polygons). |
| **Libraries**<br>7.x-1.0 | http://groups.drupal.org/libraries<br>Allows version dependent and shared usage of external libraries. |
| **LoginToboggan**<br>7.x-1.3 (4 sub modules) | http://drupal.org/project/logintoboggan<br>The LoginToboggan module offers several modifications of the Drupal login system in an external module by offering the following features and usability improvements. |
| **Menu Block**<br>7.x-2.3 (2 sub modules) | http://drupal.org/project/menu_block<br>Provides configurable blocks of menu items. |
| Menu position<br>7.x-1.0 | http://drupal.org/project/menu_position<br>Customize menu position of nodes depending on their content type, associated terms and others conditions. |
| **MultiBlock**<br>7.x-1.x-dev | http://drupal.org/project/multiblock<br>Allows the creation of multiple instances of blocks |
| **Pathauto**<br>7.x-1.0 | http://drupal.org/project/pathauto<br>Provides a mechanism for modules to automatically generate aliases for the content they manage. |
| **Term Reference Tree**<br>7.x-1.6 | http://drupal.org/project/term_reference_tree<br>An expanding/collapsing tree widget for selecting terms in a taxonomy term reference field |
| **Token**<br>7.x-1.0-rc1 | http://drupal.org/project/token<br>Provides a user interface for the Token API and some missing core tokens. |
| **Variable**<br>7.x-1.1 (5 sub modules) | http://drupal.org/project/variable<br>Variable Information and basic variable API |
| **Rules**<br>7.x-2.0 (3 sub modules) | http://drupal.org/project/rules<br>React on events and conditionally evaluate actions. |

| | |
|---|---|
| **Page Title**<br>7.x-2.5 | http://drupal.org/project/page_title<br>Enhanced control over the page title (in the <head> tag). |
| **CAPTCHA**<br>7.x-1.0-beta2 | http://drupal.org/project/captcha<br>Base CAPTCHA module for adding challenges to arbitrary forms. |
| **Google Analytics**<br>7.x-1.2 | http://drupal.org/project/google_analytics<br>Allows your site to be tracked by Google Analytics by adding a Javascript tracking code to every page. |
| **Autocomplete Deluxe**<br>7.x-1.0-beta5 | http://drupal.org/project/autocomplete_deluxe<br>Enhanced autocomplete using Jquery UI autocomplete. |
| **CKEditor**<br>7.x-1.8 | http://drupal.org/project/ckeditor<br>Enables CKEditor (WYSIWYG HTML editor) for use instead of plain text fields. |
| **CKEditor Link**<br>7.x-2.2 | http://drupal.org/project/ckeditor_link<br>Easily create links to Drupal internal paths through CKEditor. |
| **Views**<br>7.x-3.2 (2 sub modules) | http://drupal.org/project/views<br>Create customized lists and queries from your database. |
| **Views Autocomplete Filters**<br>7.x-1.x-dev | http://drupal.org/project/views_autocomplete_filters<br>Views Autocomplete Filters |
| **Views Data Export**<br>7.x-3.0-beta5 | http://drupal.org/project/views_data_export<br>Plugin to export views data into various file formats |
| **Webform**<br>7.x-3.17 (3 sub modules) | http://drupal.org/project/webform<br>Enables the creation of forms and questionnaires |

### Custom Modules

| | |
|---|---|
| **IOTC Data Feed** | IOTC Data Feed for Views Module |
| **IOTC Data Feed Statdoc** | IOTC Data Feed Statdoc for Views Module |
| **IOTC Data Feed Stats** | IOTC Data Feed Country Statistics for Views Module |

Those modules enhance the view module. They have no bad impact in the overall website or any other contrib or core modules.

**Important Note**

IOTC must require a complete documentation of those custom modules to better understand their purposes, structures, how to update and maintain their security, any incompatibilities, bugs or issues, etc.

## 1.3 Structure

### Vocabulary (Taxonomy)

| | |
|---|---|
| **Authors** | Julien Million<br>Kosta Todorovic |
| **Document types** | General, Conservation and Management Measures, Guidelines, Inspection reports, IOTC Circulars, Meeting document, Publications, Datasets, Reports, Official signatures |
| **Link types** | Conservation, International organisations, Miscellaneous, National institutions, Oceanographic resources, Other tuna commissions, Research programmes, Scientific journals, Stock assessment and data analysis tools |
| **Meeting types** | None, Commission, Special session of the Commission, Compliance Committee, Standing Committee on Administration and Finance, Scientific committee, Technical Committee on Allocation Criteria, Working Party on Billfish (WPB), Working Party on Data Collection and Statistics (WPDCS), Working Party on Ecosystems and Bycatch (WPEB), Working Party on Fishing Capacity (WPFC), Working Party on Methods (WPM), Working Party on Tagging (WPT), Working Party on Tagging Data Analysis (WPTDA), Working Party on Temperate Tuna (WPTmT), Working Party on Tropical Tunas (WPTT), Workshop, Expert consultations, Others |
| **Meeting years** | 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012 |
| **Newsletter** | IOTC e-News |
| **Tags** | *No tags at the moment* |

### Content types

| | |
|---|---|
| **Article** | Title (node), Body (long text), Url (path module form elements) |
| **Basic page** | Title (node), Body (long text), Url (path module form elements) |

| | |
|---|---|
| **Document** | Name, Type (term), Meeting (term), Meeting year (term), Meeting session (interger), URL path settings , Description , File, Tags (Term), Availability (Date ISO format), Authors (Term) |
| **Link** | Type (Term), Title (node module element), URL (text), Description (long text), URL path settings (path module form elements) |
| **Meeting** | Title (node), Meeting (term), Meeting year (term), Meeting session (integer), Date (date), Objective (long text), URL Path Settings (path module form elements), Venue (text), Chairperson (text), Summary (long text), Notes (field_notes) |
| **Newsletter** | Title (node), URL Path settings (path module form elements), Body (long text), Newsletter category (field simplenews term – term reference). |
| **Staff** | Name (node), URL Path settings (path module form elements), E-mail (text), Bio (long text), Image (image) |
| **Webform** | Title (node), Body (long text), Url (path module form elements) |

About URL Path settings (path module form elements) : see http://drupal.org/node/1244470

**Menu position**

- Meetings sub menu
- Documents sub menu
- Vessels sub menu
- About us sub menu
- Sur nous sub menu
- Data sub menu
- Statdoc sub menu

**Display Suite**

- No custom fields have been defined.
- No extra fields have been defined.
- No custom view modes have been defined.
- No style region have been defined.

Display Suite is only used on this website to control CSS/HTML layouts of content like Document, Staff, Meeting and Webform.

**Views**

Seven views have been created : vessels, vessels stats, statdoc individual, statdoc, staff and rules_scheduler, meetings, List Node Page Titles.

## 1.4 Templates & CSS

**IOTC Theme**

IOTC Theme is based on the Zen Theme but used XHTML+RDF a 1.0 in UTF-8 encoding. Some quick XHTML/CSS/RDF validations have been made successfully. Code seems to be valid and accessible which is a very good point.

## 1.5 Security

**Files & Folders Security**

As Drupal is an open-source application, it is very important to maintain optimal security.

The default “admin” login will have to be change as this ID is too generic.

The Drupal core will have to be updated to its latest version.

The other security measures seem to be followed.

## 1.6 Bugs & Issues

Some PHP memory problems have occurred but this can be resolve quite easily in the future with a new provider.

# 2. UPDATING THE WEBSITE
## *to add the CMM DB application to the previous website*

To develop and add the CMM database application to the original new IOTC website developed by Maven, many parts of Drupal has been modified. This website has been developed on a SANDBOX server and finalized on a STAGING server. It is now time to transfer this new website on a PRODUCTION server (ready to be used by both anonymous users and administrator users online).

**Installation procedure**

To install the new IOTC website with the CMM DB application, follows those 10 steps :

- Put your website in maintenance mode,
- Backup the website (Database + Drupal folder with all files) ,
- Download the Drupal and Database files backups provided,
- Create an empty Drupal database (utf8_general_ci *),
- Import the gzip file in it,
- Delete all the files inside your usual "www/your-drupal-website-folder/",
- Unzip all the files in "www/your-drupal-website-folder". You should see 7 folders (includes, misc, modules, profiles, scripts, sites, themes) and 20 files (.htaccess, authorize.php, CHANGELOG.txt, COPYRIGHT.txt, cron.php, index.php, INSTALL.mysql.txt, INSTALL.pgsql.txt, install.php, INSTALL.sqlite.txt, INSTALL.txt, MAINTENERS.txt, php.ini, phpinfo.php, README.txt, update.php, UPGRADE.txt, web.config, xmlrpc.php,
- Verify that all files & folders permissions are correct,
- Modify your "sites/default/settings.php" file regarding to your new database configuration between lines 180 and 194,
- Launch your servers (Apache, PHP and MySQL) and verify that your website is running properly.

* *For any Unicode character set,* ***operations performed using the _general_ci collation are faster than those for the _unicode_ci collation****. For example, comparisons for the utf8_general_ci collation are faster, but slightly less correct, than comparisons for utf8_unicode_ci. The reason for this is that utf8_unicode_ci supports mappings such as expansions; that is, when one character compares as equal to combinations of other characters. For example, in German and some other languages "ß" is equal to "ss". utf8_unicode_ci also supports contractions and ignorable characters. utf8_general_ci is a legacy collation that does not support expansions, contractions, or ignorable characters. It can make only one-to-one comparisons between characters.*

**URL Rewriting configuration**

One common problem that can appear is related to the "Clean URLs" function in Drupal. Clean URL requires the RewriteEngine to be On with rewriting rules. Usually this is done in a htaccess file. You can create/recreate this .htaccess file as follow :

```
#
# Apache/PHP/Drupal settings:
#

# Protect files and directories from prying eyes.
<FilesMatch
"\.(engine|inc|info|install|make|module|profile|test|po|sh|.*sql|theme|tpl(\.php)?|xtmpl)$|^(\..*|Entries.*|Repository|Root|Ta
g|Template)$">
  Order allow,deny
</FilesMatch>

# Don't show directory listings for URLs which map to a directory.
Options -Indexes

# Follow symbolic links in this directory.
Options +FollowSymLinks

# Make Drupal handle any 404 errors.
ErrorDocument 404 /index.php

# Set the default handler.
DirectoryIndex index.php index.html index.htm

# Override PHP settings that cannot be changed at runtime. See
# sites/default/default.settings.php and drupal_initialize_variables() in
# includes/bootstrap.inc for settings that can be changed at runtime.

# PHP 5, Apache 1 and 2.
<IfModule mod_php5.c>
  php_flag magic_quotes_gpc              off
  php_flag magic_quotes_sybase           off
  php_flag register_globals              off
  php_flag session.auto_start            off
  php_value mbstring.http_input          pass
  php_value mbstring.http_output         pass
  php_flag mbstring.encoding_translation    off
</IfModule>

# Requires mod_expires to be enabled.
<IfModule mod_expires.c>
  # Enable expirations.
  ExpiresActive On

  # Cache all files for 2 weeks after access (A).
  ExpiresDefault A1209600

  <FilesMatch \.php$>
    # Do not allow PHP scripts to be cached unless they explicitly send cache
    # headers themselves. Otherwise all scripts would have to overwrite the
    # headers set by mod_expires if they want another caching behavior. This may
    # fail if an error occurs early in the bootstrap process, and it may cause
    # problems if a non-Drupal PHP file is installed in a subdirectory.
    ExpiresActive Off
  </FilesMatch>
</IfModule>

# Various rewrite rules.
<IfModule mod_rewrite.c>
  RewriteEngine on

  # Block access to "hidden" directories whose names begin with a period. This
  # includes directories used by version control systems such as Subversion or
  # Git to store control files. Files whose names begin with a period, as well
  # as the control files used by CVS, are protected by the FilesMatch directive
  # above.
  #
  # NOTE: This only works when mod_rewrite is loaded. Without mod_rewrite, it is
  # not possible to block access to entire directories from .htaccess, because
  # <DirectoryMatch> is not allowed here.
  #
```

```
# If you do not have mod_rewrite installed, you should remove these
# directories from your webroot or otherwise protect them from being
# downloaded.
RewriteRule "(^|/)\." - [F]

# If your site can be accessed both with and without the 'www.' prefix, you
# can use one of the following settings to redirect users to your preferred
# URL, either WITH or WITHOUT the 'www.' prefix. Choose ONLY one option:
#
# To redirect all users to access the site WITH the 'www.' prefix,
# (http://example.com/... will be redirected to http://www.example.com/...)
# uncomment the following:
# RewriteCond %{HTTP_HOST} !^www\. [NC]
# RewriteRule ^ http://www.%{HTTP_HOST}%{REQUEST_URI} [L,R=301]
#
# To redirect all users to access the site WITHOUT the 'www.' prefix,
# (http://www.example.com/... will be redirected to http://example.com/...)
# uncomment the following:
# RewriteCond %{HTTP_HOST} ^www\.(.+)$ [NC]
# RewriteRule ^ http://%1%{REQUEST_URI} [L,R=301]

# Modify the RewriteBase if you are using Drupal in a subdirectory or in a
# VirtualDocumentRoot and the rewrite rules are not working properly.
# For example if your site is at http://example.com/drupal uncomment and
# modify the following line:
# RewriteBase /drupal
#
# If your site is running in a VirtualDocumentRoot at http://example.com/,
# uncomment the following line:
# RewriteBase /

# Pass all requests not referring directly to files in the filesystem to
# index.php. Clean URLs are handled in drupal_environment_initialize().
RewriteCond %{REQUEST_FILENAME} !-f
RewriteCond %{REQUEST_FILENAME} !-d
RewriteCond %{REQUEST_URI} !=/favicon.ico
RewriteRule ^ index.php [L]

# Rules to correctly serve gzip compressed CSS and JS files.
# Requires both mod_rewrite and mod_headers to be enabled.
<IfModule mod_headers.c>
  # Serve gzip compressed CSS files if they exist and the client accepts gzip.
  RewriteCond %{HTTP:Accept-encoding} gzip
  RewriteCond %{REQUEST_FILENAME}\.gz -s
  RewriteRule ^(.*)\.css $1\.css\.gz [QSA]

  # Serve gzip compressed JS files if they exist and the client accepts gzip.
  RewriteCond %{HTTP:Accept-encoding} gzip
  RewriteCond %{REQUEST_FILENAME}\.gz -s
  RewriteRule ^(.*)\.js $1\.js\.gz [QSA]

  # Serve correct content types, and prevent mod_deflate double gzip.
  RewriteRule \.css\.gz$ - [T=text/css,E=no-gzip:1]
  RewriteRule \.js\.gz$ - [T=text/javascript,E=no-gzip:1]

  <FilesMatch "(\.js\.gz|\.css\.gz)$">
    # Serve correct encoding type.
    Header set Content-Encoding gzip
    # Force proxies to cache gzipped & non-gzipped css/js files separately.
    Header append Vary Accept-Encoding
  </FilesMatch>
 </IfModule>
</IfModule>
```

# 3. NEW CONFIGURATION SETTINGS

## *with the CMM DB Application*

The new IOTC website developed by Maven Seychelles company is running under Drupal 7.

This is the new configuration of the website after being updated with the CMM Database Application.

## 3.1 Modules

None of the modules already installed have been deactivated or deleted except Devel (http://drupal.org/project/devel). Devel was generating too much errors during the development phase. New contrib modules have been installed and configured as follows.

**Contrib Modules**

Those following modules have been updated :

| | |
|---|---|
| **CKEditor - WYSIWYG HTML editor** 7.x-1.87 =>.x-1.9 | http://drupal.org/project/ckeditor<br>This module will allow Drupal to replace textarea fields with the CKEditor - a visual HTML editor, sometimes called WYSIWYG editor. This HTML text editor brings many of the powerful WYSIWYG editing functions of known desktop editors like Word to the web. It's very fast and doesn't require any kind of installation on the client computer. |
| **Client side Validation** 7.x-1.26 =>7.x-1.34 | http://drupal.org/project/clientside_validation<br>This module adds clientside validation (aka "Ajax form validation") for all forms and webforms using jquery.validate. The included jquery.validate.js file is patched because we needed to be able to hide empty messages. |

Those following modules have been installed, activated and/or configured :

| | |
|---|---|
| **Date** | Date has been updated to 7.X.2.5 on august 7th, 2012. |
| **Module Filter** | http://drupal.org/project/module_filter/<br>The modules list page can become quite big when dealing with a fairly large site or even just a dev site meant for testing new and various modules being considered. What this module aims to accomplish is the ability to quickly find the module you are looking for without having to rely on the browsers search feature which more times than not shows you the module name in the 'Required by' or 'Depends on' sections of the various modules or even some other location on the page like a menu item. |
| **Diff** | http://drupal.org/project/diff<br>This module adds a tab for sufficiently permissioned users. The tab shows all revisions like standard Drupal but it also allows pretty viewing of all added/changed/deleted words between revisions. |
| **Taxonomy CSV Import/Export** | http://drupal.org/project/taxonomy_csv<br>Importing/Exporting terms and vocab structure easily<br>IMPORTANT NOTE<br>To void errors during the import process, Drupal tmp must have real path (for ex : C:\xampp\htdocs\iotc_v2_sandbox2\sites\default\files\temp) |
| **Field group** | http://drupal.org/project/field_group<br>Fieldgroup will, as the name implies, group fields together. All fieldable entities will have the possibility to add groups to wrap their fields together. Field group comes with |

| | |
|---|---|
| | default HTML wrappers like vertical tabs, horizontal tabs, accordions, field sets or div wrappers. |
| **Field Collection** | http://drupal.org/project/field_collection<br>Provides a field-collection field, to which any number of fields can be attached. A field collection is internally represented as an entity, which is embedded in the host entity. Thus, if desired field collections may be viewed and edited separately too.<br>IMPORTANT NOTE<br>Field Collection uses the function entity_i8n_string() in module Entity API but this function does not exist anymore. It is necessay to use the last dev version of both "Field Collection" and "Entity API" to resolve this situation. |
| **Conditional Fields** | Conditional Fields allows you to manage sets of dependencies between fields. When a field is “dependent”, it will only be available for editing and displayed if the state of the “dependee” field matches the right condition. When editing a node (or any other entity type that supports fields, like users and categories), the dependent fields are dynamically modified with the States API.<br>IMPORTANT NOTE<br>Unfortunetaly, Conditional fields cannot be use inside a collection fields (used for the paragraphs and the appendices) and it does not worked properly with fields group. In the next release (before the end of 2012) this should be perfectly possible. |
| **Internationalization** | Multilingual content, Multilingual select and Synchronize translations sub-modules have been activated. |

### Contrib Modules

Those following modules have been installed but not yet completely activated and/or configured.

| | |
|---|---|
| **Transliteration** | No transliteration module has been installed. Transliteration provides one-way string transliteration (romanization) and cleans file names during upload by replacing unwanted characters. Generally spoken, it takes Unicode text and tries to represent it in US-ASCII characters (universally displayable, unaccented characters) by attempting to transliterate the pronunciation expressed by the text in some other writing system to Roman letters.<br>***Installed transliteration module and activate it***<br>*Go to "configuration >url aliases > settings" and check "Transliterate prior to creating alias ", save configuration. Punctuation settings for single quote, double quote, back tick, hyphen, underscore, colon, vertical bar pipe must be "replace by separator". Make sure to update or delete/recreate aliases "nodes path" after.* |

## 3.2 Libraries

| | |
|---|---|
| **CKEditor library** | http://ckeditor.com/download<br>The CKEditor module was already installed but it requires the CKEditor library to operate properly. The CKEditor library has been installed and configured.<br>*Version 3.6.3 (April 25, 2012) for Drupal has been installed.*<br>***Note***<br>*Reminder : do not install Ckeditor for Drupal, but Ckeditor standard and put it on the library folder* |

## 3.3 Configuration settings

Only the modified settings are being shown here.

**CKEditor**

The WYSIWIG Profile have been modified.

The Global Settings have been modified to welcome the CKEditor library.

**Text Formats**

Permissions have been modified as follows :

| Name | Roles |
|---|---|
| **WYSIWYG** | IOTC Administrators, IOTC Editors, IOTC Super Administrator |
| **Filtered HTML** | anonymous user, authenticated user |
| **Full HTML** | IOTC Administrators, IOTC Super Administrator |
| **Plain text** | All roles may use this format |
| **PHP code** | IOTC Super Administrator |
| **Display Suite code** | IOTC Super Administrator |

**URL Aliases**

Patterns have to be edited to welcome CMMS as follows :

- Default path pattern for CMM (applies to all CMM content types with blank patterns below): cmm/[node:title]
- Pattern for all language neutral CMM paths: cmm/[node:title]
- Pattern for all English CMM paths: cmm/[node:title]
- Pattern for all French CMM paths: mcg/[node:title]

2 aliases has been added:

- /fr/mcgs is an alias of /fr/cmms
- /fr/mcgs/avancee is an alias of /fr/cmms/advanced

No other URL aliases have been modified or created.

**Language**

Detection by URL with path prefix

Two languages set = English (default, no path prefix) + French (path prefix is fr)

**Translate Interface**

An important work has been done to translate part of the Drupal interface.

All the CMM Database Application is fully available in both English and French languages.

| Language | Views | Blocks | Fields | Node types | Menu | Taxonomy | Built-in interface |
|---|---|---|---|---|---|---|---|
| **English (built-in)** | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| **French** | 525/1353 (38.8%) | 6/6 (100%) | 89/134 (66.42%) | 3/27 (11.11%) | 1/24 (4.17%) | 72/207 (34.78%) | 127/7154 (1.78%) |

**Previous statistics for French was**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **French** | 412/1116 (36.92%) | 6/8 (75%) | 18/49 (36.73%) | | 1/26 (3.85%) | 41/49 (83.67%) | 29/6345 (0.46%) |

http://localize.drupal.org/translate/downloads

The last file version “drupal-7.13.fr.po” has been downloaded and installed. Installing Localization Client can automatize this process in the future.

## 3.4 People

Three “roles” have been added :

- **IOTC Editors** : they can only edit/delete/create a content and some usual Drupal conf related only to the content
- **IOTC Administrators** : he has most of the permissions except Drupal core configuration and he cannot create/edit/delete any administrator account, only identified users / editors
- **IOTC Super Administrator** : he has all permissions and can create/edit/delete an administrator.

Four users with “IOTC Editor” role have been created :

- Lucia PIERRE
- David WILSON

- Julien MILLION
- Donna PILIOTIS

*Password will be provided in another document for security reasons.*

One user with "IOTC SuperAdministrator" role has been created :

- Stefano PIREDDA

Concerning the permissions, this document cannot list all the settings.

Please go to /admin/people/permissions to modify permissions if needed.

You will need to be identified as "superadministrator".

## 3.5 Structure

**Blocks**

Two blocks have been updated and translated

- quicklinks block in front area
- quicklinks block in left bar

No other blocks have been modified or created.

**Content Type (CMM only)**

Below are the metadata proposed for each CMM.

English by default. French is managed by Drupal i8n. Each field is translated inside Drupal in the translate interface area /admin/config/regional/translate/translate

All fields marked with an asterisk are required.

Some fields are organized into groups (using module field_group) to facilitate the UI data entries and also for the UI data access.

Some fields are organized into "collection fields": one collection field will be a group entity made of 1+n fields. This is require for paragraphs and appendices which can multiply and are made of several fields (number, header, text, file ...).

| **Identification (field_group : group_cmm_identification)** | | | | |
|---|---|---|---|---|
| **Label** | **Translation (fr)** | **Name** | **Field** | **Drupal Settings** |
| | | node_id | Node module element | |
| | | | | |
| Title * | Titre | node_title | Text | |
| Language * | Langue | - | - | Neutral \| English \| French |
| Type * | Type | field_cmm_type | List (text) | Radio button<br>Values are : Resolution (default), Recomendation |
| Number * | Numéro | field_cmm_num | Integer | Limited to 5 chars<br>Default value : XX/XX |
| Year of Adoption | Année d'adoption | field_cmm_adoption_date | Date (ISO | Popup calendar (YY/MM/DD) |

| | | | | |
|---|---|---|---|---|
| | | | format) | Non repeating date<br>Display dates using the Long (Wednesday, August 1, 2012 - 13:25) format<br>Collect Start date only<br>Show all value(s) starting with earliest, ending with latest<br>No default value |
| | | | | |
| Status | Statut | field_cmm_status | List (text) | |
| Superseded by | Remplacé par | field_cmm_status_superseded by | Node Reference | |
| Supersedes | Remplace | field_cmm_status_supersedes | Node Reference | |
| URL path settings | - | path | Path module form elements | |

| **Date of Application (field_group: group_cmm_applicable)** | | | | |
|---|---|---|---|---|
| **Label** | **Translation (fr)** | **Name** | **Field** | **Drupal Settings** |
| Date application | Date d'application | field_cmm_applicable_date | Date (ISO format) | Popup calendar (Y/M/D)<br>Non repeating date<br>Display dates using the Long (Wednesday, August 1, 2012 - 13:25) format<br>Collect both Start and End dates<br>Show all value(s) starting with earliest, ending with latest<br>No default value |

| **Deadline (field_group : group_cmm_deadline)** | | | | |
|---|---|---|---|---|
| **Label** | **Translation (fr)** | **Name** | **Field** | **Drupal Settings** |
| Deadline | Echéance | field_cmm_deadline_date | Date (ISO format) | Popup calendar (Y/M/D)<br>Repeating date<br>Display dates using the Long (Wednesday, August 1, 2012 - 13:25) format<br>Collect Start date only<br>No default value |

| **Introductory (field_group : group_cmm_intro)** | | | | |
|---|---|---|---|---|
| **Label** | **Translation (fr)** | **Name** | **Field** | **Drupal Settings** |
| Introductory Paragraphs | Paragraphe d'intro | body | Long Text | One field per language |

| **Paragraphs (field_group : group_cmm_paragraphs )** (Field Collection embeded – *see below*) | | | | |
|---|---|---|---|---|
| **Label** | **Translation (fr)** | **Name** | **Field** | **Drupal Settings** |
| Paragraphs ordered list | Liste ordonnée de paragraphe | field_cmm_para | Field Collection | Unlimited values |

| **Paragraph** (Field Collection with Unlimited values)<br>NOTE Paragraphs are also organized into groupfields but for the sake of clearness, this is not shown here. | | | | |
|---|---|---|---|---|
| **Label** | **Translation (fr)** | **Name** | **Field** | **Drupal Settings** |
| Section | *Section* | field_cmm_para_section | Text | One field per language |
| Paragraph Number | Numéro de paragraphe | field_cmm_para_num | Integer (List) | |
| Paragraph Text | Texte de paragraphe | field_cmm_para_text | Long Text | One field per language |
| Files | Fichiers | field_cmm_para_figures | File | |
| Date of application | Date d'application | field_cmm_para_applicable_date | Date (ISO format) | Popup calendar (Y/M/D)<br>Non repeating date<br>Display dates using the Long (Wednesday, August 1, 2012 - 13:25) format<br>Collect both Start and End dates<br>Show all value(s) starting with earliest, ending with latest<br>No default value |
| Deadline | Echéance | field_cmm_para_deadline_date | Date (ISO format) | Popup calendar (Y/M/D)<br>Repeating date<br>Display dates using the Long (Wednesday, August 1, 2012 - 13:25) format |

| | | | | |
|---|---|---|---|---|
| | | | | Collect Start date only<br>No default value |

| **Footnotes (field_group : group_cmm_footnotes)** | | | | |
|---|---|---|---|---|
| **Label** | **Translation (fr)** | **Name** | **Field** | **Drupal Settings** |
| | | | | |
| Footnote | Note de pied de page | field_cmm_note_text | Long Text | One field per language |

| **Appendix (field_group : group_cmm_appendix)** (Field Collection embeded – *see below*) | | | | |
|---|---|---|---|---|
| **Label** | **Translation (fr)** | **Name** | **Field** | **Drupal Settings** |
| | | | | |
| Appendices | Annexes | field_cmm_appendix_collec | Field Collection | Unlimited values |

| **Appendix** (Field Collection with Unlimited values)<br>NOTE Appendix are also organized into groupfields but for the sake of clearness, this is not shown here. | | | | |
|---|---|---|---|---|
| **Label** | **Translation (fr)** | **Name** | **Field** | **Drupal Settings** |
| | | | | |
| Title | Titre | field_cmm_appendix_title | Text | One field per language |
| Number | Numéro | field_cmm_appendix_num | List (integer) | |
| Text content | Contenu texte | field_cmm_appendix_text | Long text | One field per language |
| Files | Fichiers | field_cmm_appendix_file | | One field per language<br>Only JPG,PNG and GIF are authorized<br>Public files upload destination is : /sites/default/files/cmm/figures |

| **Taxonomy Targets (field_group : group_cmm_targets)** | | | | |
|---|---|---|---|---|
| **Label** | **Translation (fr)** | **Name** | **Field** | **Drupal Settings** |
| Species Groups | Espèces Groupes | field_ref_speciesgroups | Term reference | Deny any new terms<br>Unlimited values<br>Hierarchical terms |
| Fishing Gears | Engins de pêche | field_ref_fishing_gears | Term reference | Deny any new terms<br>Unlimited values<br>Hierarchical terms |
| Fisheries | Pêcheries | field_ref_fisheries_type | Term reference | Deny any new terms<br>Unlimited values<br>Hierarchical terms |
| Responsability | Responsabilité | field_ref_responsability | Term reference | Deny any new terms<br>Unlimited values<br>Hierarchical terms |
| Requirement Type | Type d'exigence | field_ref_requirement_type | Term reference | Deny any new terms<br>Unlimited values<br>Hierarchical terms |
| Other core topics | Autres catégories | field_ref_topics | Term reference | Deny any new terms<br>Unlimited values<br>Hierarchical terms |

| **PDF (field_group : group_cmm_files)** | | | | |
|---|---|---|---|---|
| **Label** | **Translation (fr)** | **Name** | **Field** | **Drupal Settings** |
| | | | | |
| PDF | PDF | field_cmm_pdf | File | One field per language<br>Only PDF are authorized<br>Public files upload destination is : /sites/default/files/cmm/pdf<br>Size limit : 16 MB (can be limited by your Apache configuration)<br>CSS : field-name-field-cmm-pdf |

### Fields Dependencies

Those are the dependencies set for this release :

- **field_cmm_status_superseded by** is visible when **field_cmm_status** has value "superseded by"

- **field_cmm_supersedes** is visible when **field_cmm_status** has value "supersedes" AND **field_cmm_type** has value "resolution".

**Taxonomy (CMM only)**

Vocabulary is localized in this website. That means that terms are common for all languages, but their name and description may be localized. For each vocabulary and term, it will be necessary to give a translation.

**Views (CMM only)**

Two views have been created : CMM (advanced search) and CMM (Basic Search). Each of them will provide two search tools and also two export tools (CSV export). CSV will not be detailed in this document.

- **CMM (basic search)**

  CMM (Basic Search) uses the following fields :

  - Content: Title (Title)
  - Content: Year of adoption (Date of adoption)
  - Content: Status (Status)
  - Content: Supersedes (Supersedes)
  - Content: Superseded by (Superseded by)
  - Content: Body (Body)
  - Content: Paragraphs (Paragraphs)
  - Content: PDF (Download PDF)
  - (File) File: Mime type (Mime type)
  - (File) File: Name (Name)
  - (File) File: Size (Size)

  CMM (Basic Search) uses the following filters :

  - Content: Type (= CMM)
  - Content: Published (Yes)
  - Content: Type (exposed)
  - Content: Year of adoption ( exposed Select Year)
  - Content translation: Language (= Current user's language)
  - CMM Species and Groups (has taxonomy term translated) (exposed)
  - CMM Fishing Gears (has taxonomy term translated) (exposed)
  - CMM Fisheries (Has taxonomy term translated) (exposed)
  - CMM Responsibility (Has taxonomy term translated) (exposed)
  - CMM Requirement Type (has taxonomy term translated) (exposed)

  Exposed filters are the filters that will appear for the web user (dropdown lists or search boxes for example) to search for CMMs.

  CMM ( Basic Search) requires one relationship :

  - File Usage: File

- **CMM (advanced search)**

  CMM (Advanced Search) uses the following fields :

- (field collection item from field_cmm_para_collec) Field collection item: Paragraph Number (#)
- (field collection item from field_cmm_para_collec) Field collection item: Paragraph Text (Paragraph Text)
- Content: PDF (Download PDF)
- (File) File: Mime type (Mime type)
- (File) File: Name (Name)
- (File) File: Size (Size)

CMM ( Advanced Search) uses the following filters :

- Content: Type (= CMM)
- Content: Published (Yes)
- Content translation: Language (= Current user's language)
- Content: Status (in Active, Active that supersedes)
- Content: Year of adoption (exposed Select Year)
- (field collection item from field_cmm_para_collec) Field collection item: Paragraph Text (exposed)
- CMM Species and Groups (has taxonomy term translated) (exposed)
- CMM Fisheries (Has taxonomy term translated) (exposed)
- CMM Fishing Gears (has taxonomy term translated) (exposed)
- CMM Responsibility (Has taxonomy term translated) (exposed)
- CMM Requirement Type (has taxonomy term translated) (exposed)

Exposed filters are the filters that will appear for the web user (dropdown lists or search boxes for example) to search for CMMs.

CMM ( Advanced Search) uses the following sort criterias :

- (field collection item from field_cmm_para_collec) Field collection item: Paragraph Number (asc)
- Content: Title (asc)

CMM ( Advanced Search) requires two relationships:

- File Usage: File
- Content: Paragraphs

**Important Note**

Those two views have been fully translated in both languages which is a little bit different than what the Maven's company has done. They have duplicated their views for both languages. It could be useful to ask why they've taken this option.

## 3.6 Templates & CSS

To better display the new CMM Database Application Administration and Web pages, some CSS files has been updated. Only the new code lines are displayed here.

**IOTC Theme CSS**

One CSS file has been updated.

### sites/all/theme/iotc/fields.css

The file “fields.css” is partially deprecated. The Original file is available as fields.css.old.

Added code lines are :

```
/* IOTC New Fields Classes */

/* CMM Filters */
#edit-field-cmm-para-text-value { margin-bottom:50px; width:375px; }
/* CMM Metadatas */
.field-type-taxonomy-term-reference { margin-right:5px; padding-right:5px; border-right:1px gray dotted; }
/* CMM Core infos */
h1#page-title { margin-bottom:10px; }
.field-name-field-cmm-subtitle { color: #1A6494; font-family: 'Times New Roman'; font-size: 14px; font-weight: normal; line-height: 1.2em; text-transform: uppercase; margin-bottom:10px; }
.views-field-cmm-subtitle { color: #1A6494; }
.field-name-field-cmm-num { text-transform:uppercase; color:#1A6494; font-weight:normal; font-family: Times,serif; font-size:16px; padding:0px 10px 20px 0; }
.field-name-field-cmm-type { font-weight:normal; font-family: Times,serif; font-size:16px; text-transform:uppercase; color:#1A6494; float:left; padding:0px 20px 20px 0; }
.views-field-field-cmm-status a { padding-left:5px;}
.field-name-field-cmm-status { margin: 10px 10px 10px 0;  padding:10px; font-family: verdana; color:#FFF; font-size:14px; text-transform:uppercase; text-align:center; font-weight:bold; background:#4CB2E7; float:left; }
.field-name-field-cmm-status-supersededby { font-size:12px; float:left; padding-bottom:10px; }
.field-name-field-cmm-status-supersededby a{ color:#4CB2E7; }
.field-name-field-cmm-status-supersededby a:hover{ color:#D20000; }
/* CMM Timelines */
.field-name-field-cmm-adoption-date, .field-name-field-cmm-para-adoption-date,.field-name-field-cmm-applicable-date { clear:left; }
.field-name-field-cmm-applicable-date  .field-label,  .field-name-field-cmm-para-applicable-date  .field-label{  font-size:15px;  font-weight:normal; font-family: Times,serif; color:#1A6494; }
.field-name-field-cmm-adoption-date  .field-label { font-size:15px; font-weight:normal; font-family: Times,serif; color:#1A6494; }
#cmm_full_group_cmm_targets { float:left; }
.field-name-field-cmm-deadline-date  .field-label,  .field-name-field-cmm-para-deadline-date  .field-label{  color:#1A6494;  font-weight:normal; font-family: Times,serif; font-size:15px; }
/* CMM Intro & Paragraphs */
.field-name-field-cmm-para-figures {}
.field-name-field-cmm-para-section, .field-name-field-cmm-appendix-title { font-weight:bold; margin-bottom:5px; }
.field-type-text-with-summary p {}
.field-name-field-cmm-para-text p { margin:0; padding:0; padding-left:20px; }
.field-name-field-cmm-para-num, .field-name-field-cmm-appendix-num { float:left; margin: 0 10px 0 0; }
.field-name-field-cmm-para-num { font-weight:bold; }
.field-name-field-cmm-para-figures { font-weight:normal; padding:10px 0 0 20px; }
/* Footnotes */
.field-name-field-cmm-footnote-text { background:#eee;  font-style:italic; padding:10px; }
/* PDF */
.field-name-field-cmm-pdf { font-size:12px; /* float:right; margin: -50px 0 10px 0; */ }
.views-field-field-cmm-pdf-1 { width:90px; }
.group-cmm-appendix { padding:0 20px;  margin:0; }
.field-name-field-cmm-appendix-num { padding:5px; background:#4CB2E7; color:#FFF; }

/* IOTC New Field Collection Classes */

.field-collection-container {  border-bottom:0;  margin-bottom:0; }
.field-collection-view { margin: 0; border-bottom:0; padding: 0; }
#field-collection-item-field-cmm-para-collec { border-bottom:1px solid #ccc; }
```

### Seven Administration Theme CSS

Two CSS files has been updated.

### themes/seven/styles.css

```
fieldset .fieldset-wrapper {          /* padding: 0 13px 13px 15px; */ }
.form-item {   /* padding: 9px 0;*/    padding: 5px 0;   margin: 0 0 10px; }
```

### themes/seven/vertical-tabs.css

```
.vertical-tabs .form-type-textfield input { /* width: 100%; */ -moz-box-sizing: border-box;
  -webkit-box-sizing: border-box; box-sizing: border-box; }
.vertical-tabs-pane .fieldset-wrapper > div:first-child { ~~padding-top: 5px;~~ }
```

## 3.7 Security & Performance

**Drupal Files**

Before taking the website online on a PRODUCTION state, it will be necessary to delete or move the following files from your site:

- install.php
- CHANGELOG.txt
- INSTALL.txt
- INSTALL.mysql.txt
- INSTALL.pgsql.txt
- LICENSE.txt
- MAINTAINERS.txt
- UPGRADE.txt

and also

- INSTALL.sqlite.txt
- COPYRIGHT.txt
- README.txt

The basic reason for this is to attempt mask the Drupal version from the most common scanning methods.

*For other security tips, visit* http://drupal.org/security/secure-configuration

**Performance**

Go to *Administer > Site configuration > Performance*

Activate options for page cache, CSS optimization, and block cache and JavaScript optimization. That standard optimization and database caching can be enough for many sites.

If better optimization is required, you might install one or two performance modules. For example, if the site is on a shared server, try Boost (static page caching for non-logged in visitors), complemented with Authcache -in CR's file or db mode- or Advanced Cache (for logged in members). If on a VPS or dedicated server, there are several suitable options: Boost (for example on a low RAM VPS), Authcache, Cache Router (which includes APC, Memcache...), Varnish, etc. Memcache and Varnish are also especially suitable when load-balancing multiple servers.

*For other performance tips, visit* http://drupal.org/node/326504

## 3.8 Bugs & Issues

Some issues and bugs have been identified and are related to Drupal contrib modules. Some of them have already been submitted on Drupal.org. As soon as new development or stable versions are available, it will be necessary to update the modules listed below.

Those issues will not have any impact for web users. They occur only when you are logged on as an administrator

**Field Collection**

Fatal error: Call to undefined function entity_i18n_string()

http://drupal.org/node/1513406

Field Collection uses the function entity_i8n_string() in module Entity API but this function does not exist anymore. It is necessary to use the last dev version of both "Field Collection" and "Entity API" to resolve this situation.

Conditional fields / Field Collection

Unfortunately, Conditional fields cannot be use inside a collection fields (used for the paragraphs and the appendices) and it does not worked properly with fields group. In the next dev release this should be corrected.

Invalid argument supplied for each() in file_field_widget_submit - line 753. http://drupal.org/node/1329856

Unlimited values for Field Collection cause some errors (creating empty fields each time the node is saved)

*Not yet submitted on Drupal community*

**Internationalization**

Term reference fields do not display translated taxonomy terms

http://drupal.org/node/1175924

Taxonomy terms are not translated in content create/edit form

http://drupal.org/node/1281704

If a node is publish in one language, and not in the other language, this can lead to page errors.

*Not yet submitted on Drupal community*

**Node Reference**

Node reference doesn't work when title exceeds 128 characters.

Patch to apply to node_reference.module :

http://drupal.org/files/issues/references-n1064544-3.patch

```
Index: node_reference/node_reference.module
===================================================================
RCS file: /cvs/drupal-contrib/contributions/modules/references/node_reference/Attic/node_reference.module,v
retrieving revision 1.1.2.6
diff -u -p -r1.1.2.6 node_reference.module
--- node_reference/node_reference.module       15 Feb 2011 22:09:23 -0000      1.1.2.6
+++ node_reference/node_reference.module       20 Feb 2011 17:31:25 -0000
@@ -456,6 +456,7 @@ function node_reference_field_widget_for
       '#size' => $instance['widget']['settings']['size'],
       '#element_validate' => array('node_reference_autocomplete_validate'),
       '#value_callback' => 'node_reference_autocomplete_value',
+      '#maxlength' => 255,
     );
     break;
```

**CKEditor / Fieldgroup conflict**

CKEditor does not work properly. It is not possible to use field group accordéon+Ckeditor as a JS conflict appear. The default collapsible of Drupal is being used instead (which is very close to accordeon).

**OpenLayers**

Openlayers is generating a lot of warnings which is painful when accessing administration pages. Maven should look at this to identify what is the problem. Can be useful to install the library directly on the server in sites/all/libraries/openlayers.

**Views**

Notice: Undefined index: field_document_type_tid_i18n in views_handler_filter->accept_exposed_input() (line 547 of \sites\all\modules\views\handlers\views_handler_filter.inc).

Notice: Undefined index: field_meeting_tid_i18n in views_handler_filter->accept_exposed_input() (line 547 of \sites\all\modules\views\handlers\views_handler_filter.inc).

Those errors are related to the IOTC website and they appear when going from the English to the French version in the DOCUMENT or VESSELS section and only on a local server. It can be related to the duplicate views created.

Annex 4: Editor Manual

# Editor Manual

## DEVELOPMENT OF AN ONLINE DATABASE FOR THE INDIAN OCEAN TUNA COMMISSION (IOTC) CONSERVATION AND MANAGEMENT MEASURES

**Project ref. N° EA-5.2-B22**

**Region: East Africa**
**Country: Seychelles**

**August 21, 2012**
**Written by Stefano PIREDDA**

**Assignment by:**

AGORA 2000

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# INTRODUCTION

## Drupal 7

In order to develop the new IOTC website, Drupal version 7 has been chosen as the main CMS (Content Management System) and CMF (Content Management Framework).

Drupal is a free and open-source (CMS) written in PHP language and distributed under the GNU General Public License. It is used as a back-end system for at least 1.5% of all websites worldwide ranging from personal blogs to corporate, political, and government sites including whitehouse.gov and data.gov.uk. It is also used for knowledge management and business collaboration. (source, Wikipedia).

A CMS (Content Management System) is a computer system that allows publishing, editing, and modifying content as well as site maintenance. It provides a collection of procedures used to manage workflow in a collaborative environment. These procedures can be manual or computer-based.

## IOTC new website

The new IOTC website has been developed by the Maven company. The CMM application (database and search tools) has been developed by AGORA'2000 inside this new website.

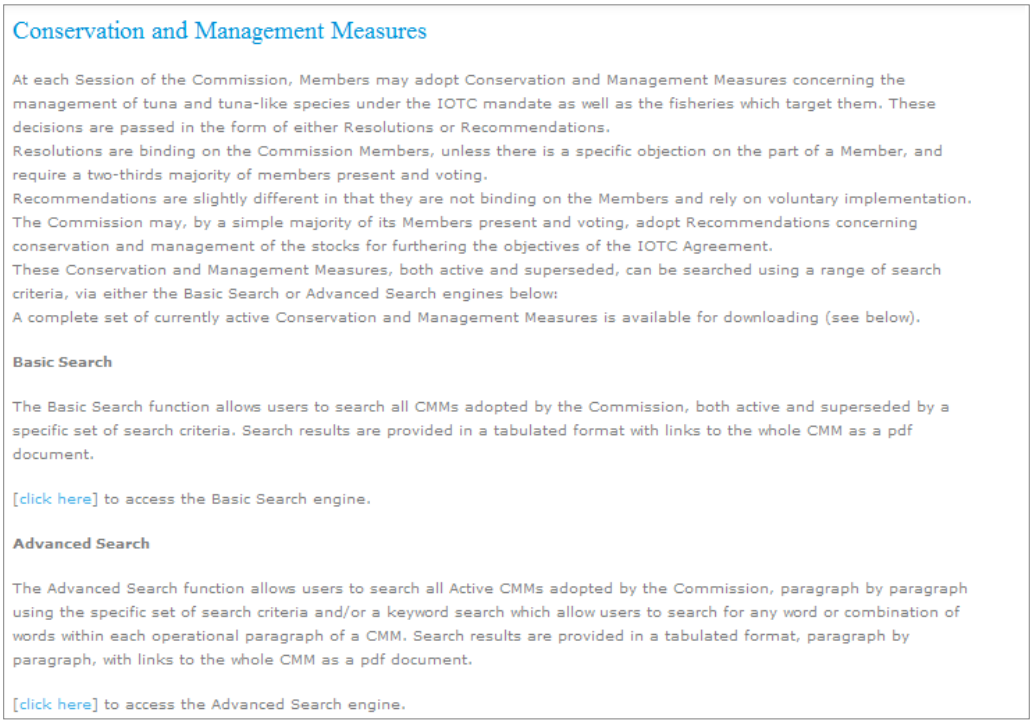
IOTC new website provide many features and type of content but this document is exclusively about the CMM application. In order to use other features and Drupal features of the new IOTC website, it will be necessary to read carefully the forthcoming Maven's documentation.

# SEARCH & DISPLAY CMMs

The web user (identified and unidentified user) can search for CMMs by using two different tools. A Basic Search and an Advanced Search are available.

## Main Page

Go to: http://www.iotc.org/cmms/for the English version of the website) or http://www.iotc.org/fr/mcgs/ (for the French version of the website – not yet available)



Conservation and Management Measures

At each Session of the Commission, Members may adopt Conservation and Management Measures concerning the management of tuna and tuna-like species under the IOTC mandate as well as the fisheries which target them. These decisions are passed in the form of either Resolutions or Recommendations.
Resolutions are binding on the Commission Members, unless there is a specific objection on the part of a Member, and require a two-thirds majority of members present and voting.
Recommendations are slightly different in that they are not binding on the Members and rely on voluntary implementation. The Commission may, by a simple majority of its Members present and voting, adopt Recommendations concerning conservation and management of the stocks for furthering the objectives of the IOTC Agreement.
These Conservation and Management Measures, both active and superseded, can be searched using a range of search criteria, via either the Basic Search or Advanced Search engines below:
A complete set of currently active Conservation and Management Measures is available for downloading (see below).

**Basic Search**

The Basic Search function allows users to search all CMMs adopted by the Commission, both active and superseded by a specific set of search criteria. Search results are provided in a tabulated format with links to the whole CMM as a pdf document.

[click here] to access the Basic Search engine.

**Advanced Search**

The Advanced Search function allows users to search all Active CMMs adopted by the Commission, paragraph by paragraph using the specific set of search criteria and/or a keyword search which allow users to search for any word or combination of words within each operational paragraph of a CMM. Search results are provided in a tabulated format, paragraph by paragraph, with links to the whole CMM as a pdf document.

[click here] to access the Advanced Search engine.

*Figure : English CMM default webpage*

## Basic Search

Go to: http://www.iotc.org/cmms/basic (for the English version of the website) or http://www.iotc.org/fr/mcgs/simple (for the French version of the website)

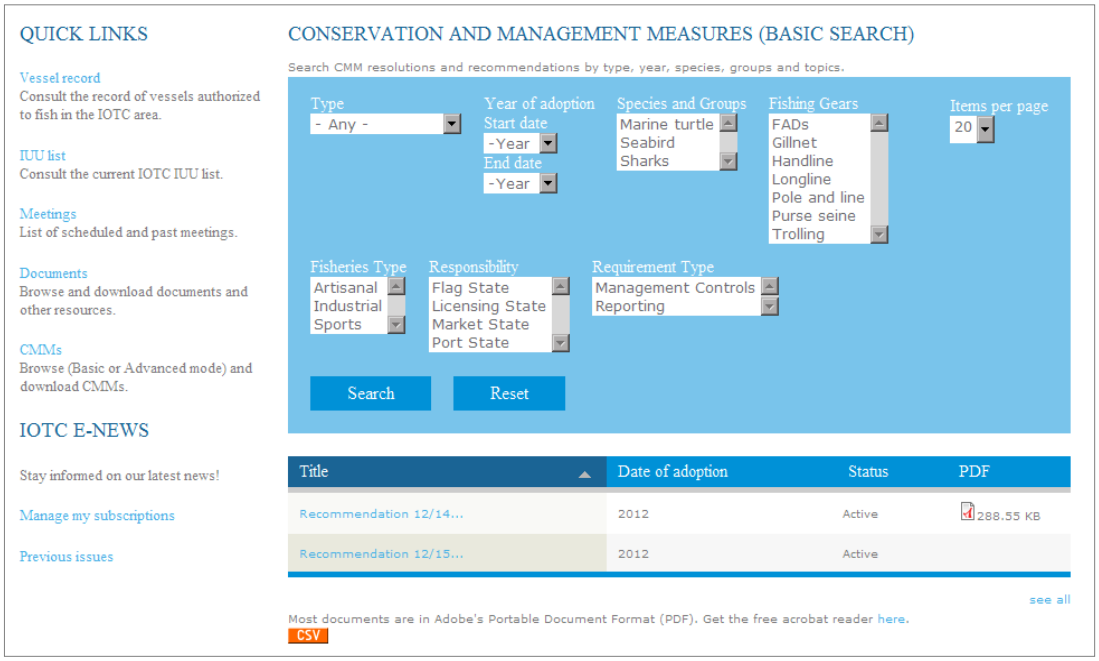



*Figure : English CMM Basic Search webpage*

- You can apply several filters to search in the CMMs database :
  - Filter by Type
  - Filter by Year of Adoption (from > to)
  - Filter by Species and Groups
  - Filter by Fishing Gears
  - Filter by Fisheries Type
  - Filter by Responsibility
  - Filter by Requirement Type
  - You can select how much items you want to display per page
- Click on “Search” to display the result. Click “Reset” to cancel your selections.
- By default, all CMMs will be displayed sorted by date. You can sort the result by Title, Date of Adoption, or Status by clicking on the table header.
- Click on the PDF icon to download the CMM in a PDF format.
- Click on the CMM title to display the full CMM on an HTML web format. This will give you access to many other information (metadata, etc.).
- Click on the CSV icon to create an export of all the results on a CSV UTF-8 format. The file will be downloaded automatically by your web browser.

## Advanced Search

Go to : http://www.iotc.org/cmms/advanced (for the English version of the website)
or http://www.iotc.org/fr/mcgs/avancee (for the French version of the website)

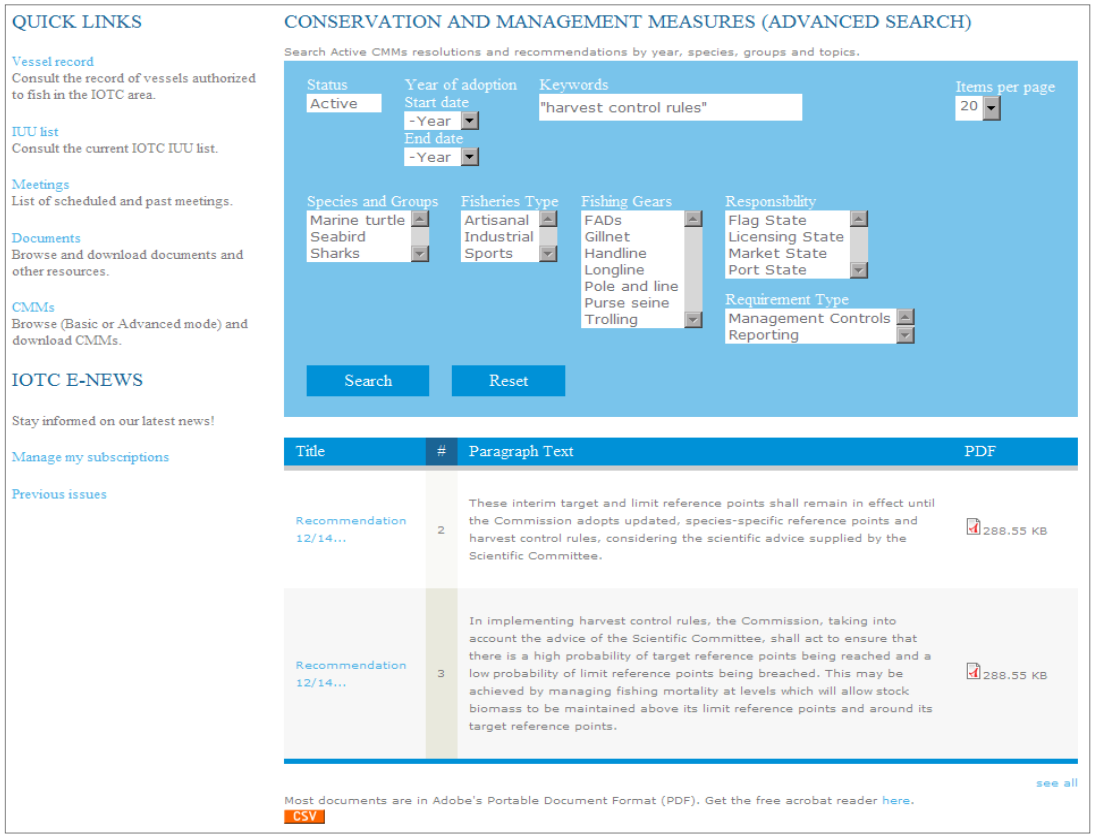



*Figure : English CMM Advanced Search webpage*

- You can apply several filters to search in the CMM database :
  - Filter by Status
  - Filter by Year of Adoption (from > to)
  - Filter by Keyword :
    *Without quotes* you will search for a string *strictly equal*.
    *With quotes*, you will search for *any of the keywords* you have entered.
  - Filter by Species and Groups
  - Filter by Fishing Gears
  - Filter by Fisheries Type
  - Filter by Responsibility
  - Filter by Requirement Type
  - You can select how much items you want to display per page

- Click on “Search” to display the result. Click “Reset” to cancel your selections.

- By default, all CMMs will be displayed sorted by date. You can sort the result by Title, Date of Adoption, or Status by clicking on the table header.

- Click on the PDF icon to download the CMM in a PDF format.

- Click on the CMM title to display the full CMM on an HTML web format. This will give you many other information (metadata, etc.).

- Click on the CSV icon to create an export of all the results on a CSV UTF-8 format. The file will be downloaded automatically by your web browser.

## Displaying a CMM

As soon as the web user as clicked on the CMM title, he will be redirected to the CMM webpage.

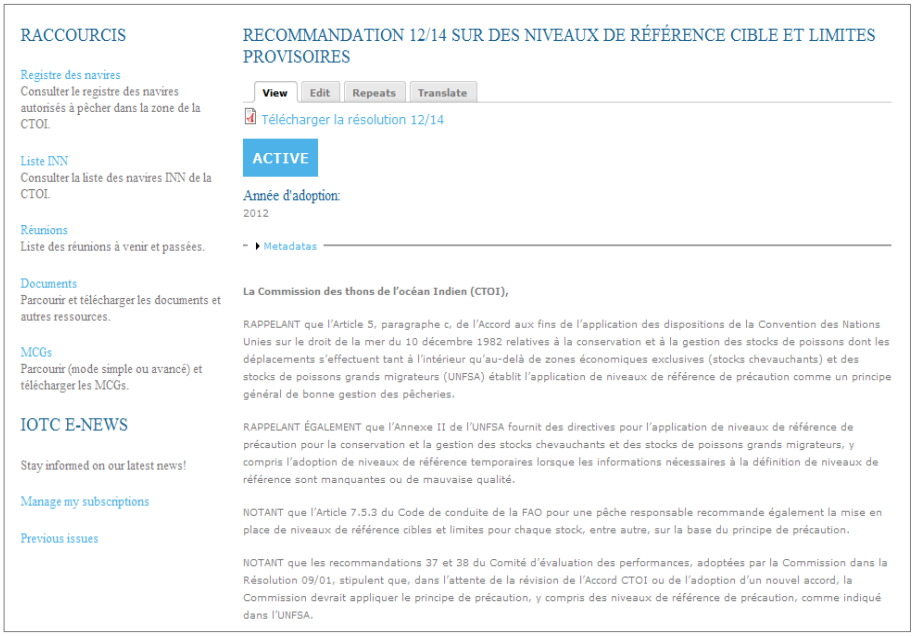



*Figure : Displaying the full CMM in French (sample screen capture)*

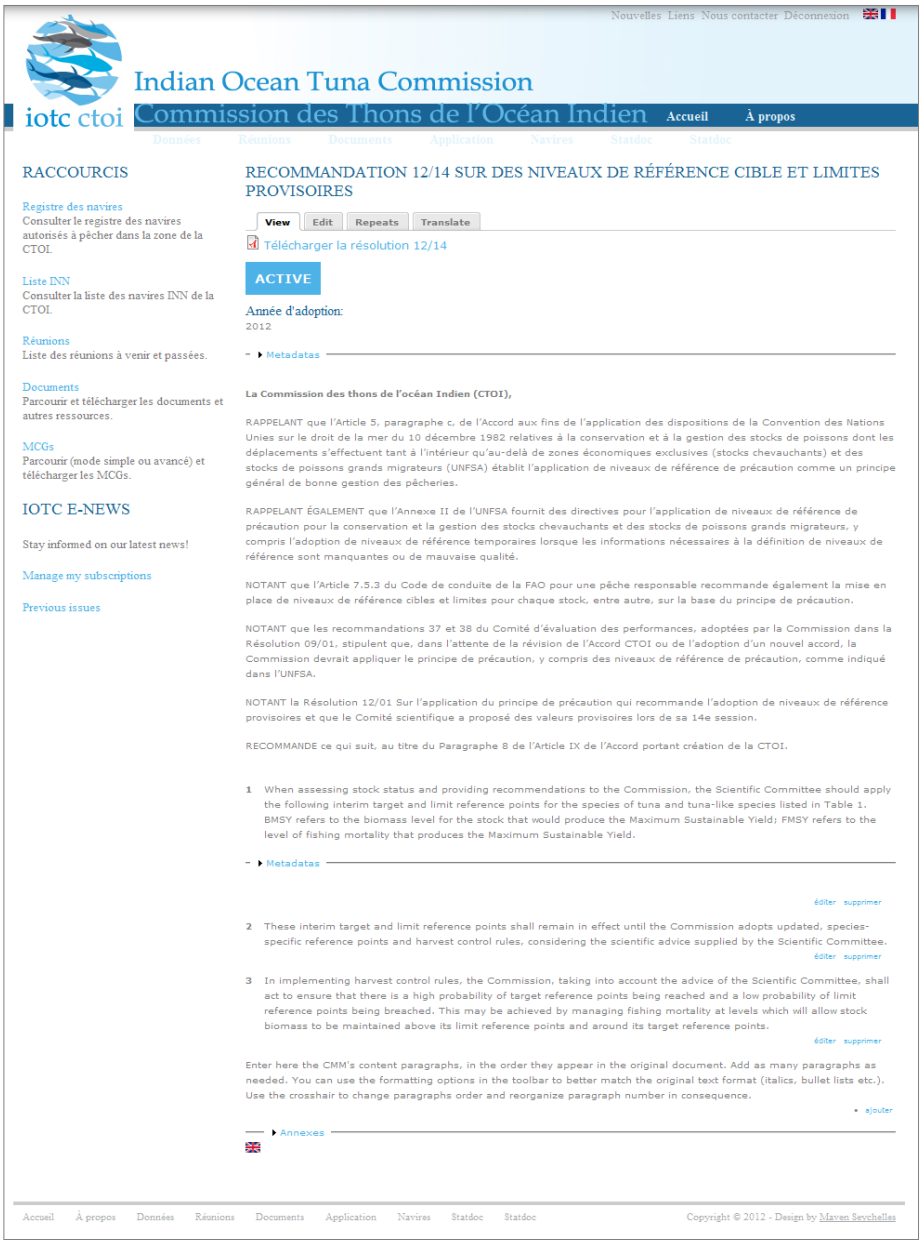



*Figure : Displaying the full CMM in French (complete screen capture)*

# EDITORS ACCOUNTS

## Role

Your account has been set to "Editors". You can manage most of the content of the website but you cannot modified the advanced configuration of Drupal.

For you to know, 3 other roles have been set up on Drupal :

- **Anonymous Users :** they can only visit the website,
- **Administrators :** they have more permissions than editors and can modify most of the Drupal configuration
- **Superadministrator :** this administrator has full access and has all the permissions. This account must only be used by a very qualified person and must be totally secured.

## Account

An account is based on a :

- **e-mail** : your email at the IOTC that will be used as the login
- **user name** : made of name and surname, *e.g. Stefano PIREDDA*
- **password :** unique password made of letters, numbers and special characters
- **language :** French or English (language of Drupal User Interface)

**Important Note**

"Website Content" and "Drupal UI" are two separate things. You can be logged with a default language set to English OR French depending of your account configuration. This has no consequence on the language content you want to edit. At any time, you will have the opportunity to manage both English and French content.

## Identification

2 Go to your website www.iotc.org
3 Click on "Login" link on the right top of the screen
4 You are logged in !
5 Click on "Log out" link on the right top of the screen
6 You are logged out !

## Toolbars

Once you are logged in, you will be redirected to a dashboard and two toolbars will appear on top of your browser screen and in every web page of the new IOTC website. In Drupal, viewing a content and editing a content is done in the same screen.

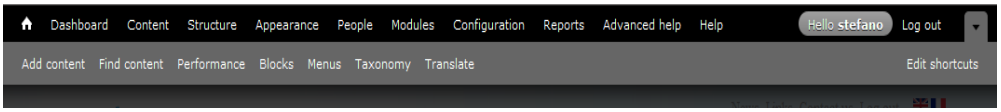



*Figure : Top Toolbars of an Editor, Administrator*

- **The black toolbar** gives you access to all the Drupal configuration (some areas of the configuration may be restricted as you are an editor).
- **The grey toolbar** called "shortcuts toolbar" gives you the opportunity to have a selection of 6 shortcuts to the configuration pages you used to go. It is really easy to add or delete any shortcuts.

*Adding/Deleting a shortcut*

Go to the administration page for which you want a shortcut and click (+) sign on the right of the administration page title like the example below. After clicking on the (+) the shortcut to this page will be added on your toolbar. The (+) near the title will become a (-). If you click again the shortcut will be deleted.

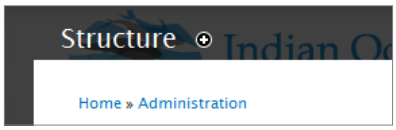



*Figure : Add Structure in your shortcuts toolbar*

*Modifying an existing shortcut*

Click on "Edit shortcuts" to manage all your shortcuts (hide/display). You can hide, delete, create or even change their order.

# MANAGING TAXONOMY

Taxonomy is for categorizing content. Terms are grouped into vocabularies. For example, a vocabulary called "Fruit" would contain the terms "Apple" and "Banana".

The Drupal Taxonomy core module is one of its most powerful features. It allows administrators to organize and reorganize content easily, giving more flexibility for knowledge. Basic terminology :

- **Taxonomy**: The name of Drupal's core (included) module for classification.
- **Category**: The label used in the Administrator area for configuring taxonomy.
- **Vocabulary**: A group of taxonomy terms.
- **Term**: A label (of a taxonomy vocabulary) that can be applied to an item.
- **Labels, Tags**: other words that are sometimes loosely applied to mean the same thing as "Term."

**Important Note**

Vocabularies for CMMs have been already created. You can only managed terms (add/delete/edit and change their hierarchy).

## Creating a taxonomy term

- Go to Structure > Taxonomy >
- Choose the Vocabulary you want to edit. Click “add term”
- Fill in the name and the description if you need to, URL path must be leave as “generate automatic URL alias”.

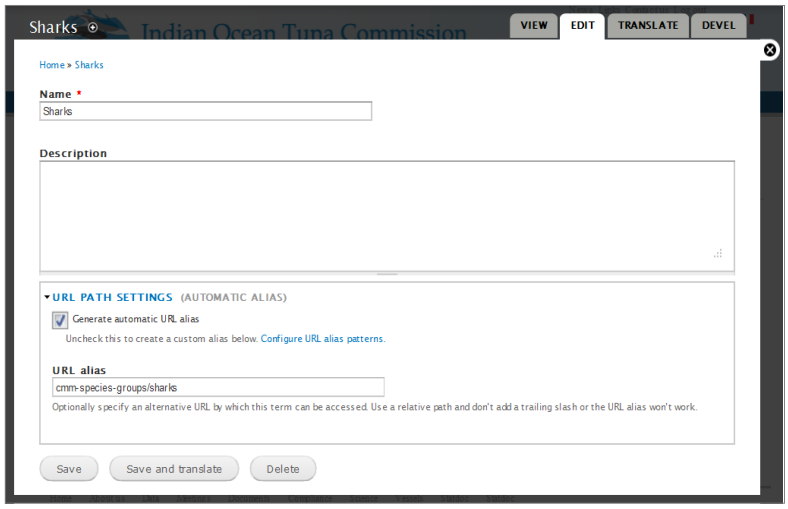



*Figure : Add a taxonomy term*

- Click on the “Save and Translate” button

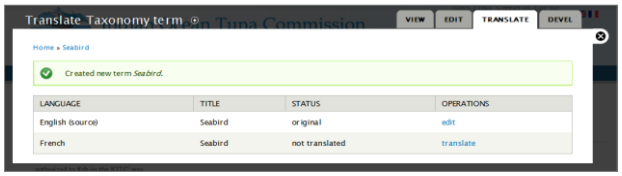



*Figure : Translate a Taxonomy Term*

*As you can see in the figure, the status of the French translation is "not translated".*

- Click on the "Translate" link to give to Drupal the French translation. As for the English version you will have to give the French name and description (if needed). Save your work. Once done, go back to Structure > Taxonomy > *and choose again the vocabulary you want to edit*

## Editing a taxonomy term

- Go to Structure > Taxonomy >
- Choose the Vocabulary you want to edit. Click "list terms".
- Choose the term you want to edit. A term is defined by a name, a description, a text format, a URL path settings (keep "generate automatic URL alias").
- You can "save" your modification as it is or "save and translate" if you want to edit the French version (or any other languages configured on the website) of the same term.

## Deleting a taxonomy term

- Go to Structure > Taxonomy >
- Choose the Vocabulary you want to edit. Click "list terms".
- Choose the term you want to delete. Click "edit".
- Click on the "delete" button to delete the term and its children and translations. Any deletion will be confirmed but once confirmation done it will not be possible to undo this operation.

*Figure : Delete a Taxonomy Term*

## Editing the list of terms and its hierarchy

- Go to Structure > Taxonomy >
- Choose the Vocabulary you want to edit and click "list terms"
- Click on the crosshair icon and move the term on the right. The previous term will become the parent of this new child. It is really easy to organize terms !

*Figure : Make a Term a child of another Term*

**Important note**

If you click on the button "reset to alphabetical", you will lose all your parent/child relations, and all terms will be reorder in the alphabetical order.

## Importing / Exporting a long list of terms

*Importing*

A contrib module called Taxonomy CSV Import / Export has been added to your website. This module will give you the opportunity to insert one to many terms very easily.

- Go to Structure > Taxonomy >
- Choose the second tab "CSV Import"
- Use this "6 steps form" to import a taxonomy, a structure or a list of terms into a vocabulary from a simple CSV file, a URL or a copy-and-paste text.
    - *"What do you want to import?"* Choose structure in flat vocabulary
    - *"Where are all the items to import?"* Copy and paste your terms or choose "In a local file" to select a CSV file.
    - *"How is your source formatted?"* Normally you don't have to change any selection except if your CSV requires it. Be careful to choose "Fixed plain text" as the default text format and specify the default language of your terms. Leave everything else by default.
    - *"Which vocabulary do you want to import into?"* Choose an existing vocabulary by choosing in the list menu. Leave everything else by default.
    - *"When a term exists, what to do with it?"* Choose "Update and merge" this will avoid any duplicate terms.
    - *"Information on process and advanced options"* Leave all the default option to have a complete summary of what the module has done with your terms in the database.

*Exporting*

- Go to Structure > Taxonomy >
- Choose the second tab "CSV Export"
- Use this "3 steps form" to export a list of terms from a vocabulary.

- *"What do you want to export?"* Choose for example "term names" and then which vocabulary you want to export.
- *"How do you want to format your CSV file?"* Choose your favourite format.
- *"Advanced and specific options"*

# MANAGING CMMs

## Searching for a CMM

Go to Content > All contents are displayed below with a search filter where you can specified what you want to list (CMM, documents, meetings, …), the status of the document (published, not published, up to date translation, outdated translation …), the language (neutral, English or French).

## Creating a CMM / MCG

- Go to Content >
- Click on "Add a content"
- Choose "CMM"

The creation of a CMM is subdivided into tabs : identification, date of application, deadline, introductory, paragraphs, appendices, footnotes, taxonomy targets and PDF.

*All fields followed by a red asterisk (*) are required.*

*All fields followed by a sync mark-up* SYNC *will mean that any changes made on the current language content will be sync with the translated version of this content.*

| | |
|---|---|
| **Identification** | **Title*** <br> The full title of the CMM in lowercase. <br> *For example : RESOLUTION 12/12 TO PROHIBIT THE USE OF LARGE-SCALE DRIFTNETS ON THE HIGH SEAS IN THE IOTC AREA* <br> **Language*** <br> Language must be set to English or French. During the translation, the other language will automatically be selected. Any modifications are disabled. <br> **Type *** <br> SYNC <br> ▪ Resolution <br> ▪ Recommendation : A Recommendation cannot supersede a resolution <br> **Number*** <br> SYNC <br> The CMM number, using the format "YY/XX" where XX is the CMM number for year YY <br> **Year*** <br> SYNC <br> Year of adoption (YYYY) <br> **Status*** <br> SYNC except the CMMs selected <br> ▪ Pending <br> ▪ Active <br> ▪ Active that supersedes : Select here the CMM(s) that this CMM supersedes. |

| | |
|---|---|
| | ▪ Superseded by **:** Select here the CMM that supersedes this one. |
| **Date of application** | **Date of application**<br>SYNC<br>▪ Start Date (DD/MM/YYYY)<br>▪ End Date (DD/MM/YYYY) *(optional)* |
| **Deadline** | **Deadline**<br>SYNC<br>▪ Start Date (DD/MM/YYYY)<br>▪ Repeat *(optional)* |
| **Introductory paragraph** | **Introductory**<br>Enter here the text of the CMM's Introductory paragraphs. You can use the formatting options in the toolbar to better match the original text format (italics, bullet lists, etc.). |
| **Paragraphs** | **Paragraph**<br>Enter here the CMM's content paragraphs, in the order they appear in the original document. Add as many paragraphs as needed. You can use the formatting options in the toolbar to better match the original text format (italics, bullet lists etc.). Use the crosshair to change paragraphs order and reorganize paragraph number in consequence.<br>▪ **Section:** If this is the beginning of a new section, please specify its name.<br>▪ **Number:** The paragraph number as it appears in the original text of the CMM.<br>▪ **Text Content:**<br>▪ **Figures/files:** Files must be less than **8 MB**. Allowed file types: **txt pdf jpg jpeg png doc docx xls xlsx ppt pptx rtf**.<br>▪ **Date of application** (start and end date)<br>▪ **Deadline** (one to many). |
| **Appendices** | **Appendices**<br>Add as many appendices as needed. Each appendices is composed of different fields :<br>▪ **Title**<br>▪ **Number :** number must be exclusively integers and no more Roman Numbers or else.<br>▪ **Text Content :** Enter here the text of the appendix. You can use the formatting options in the toolbar to better match the original text format (italics, bullet lists etc.).<br>▪ **Figures** |
| **Footnotes** | **Footnotes**<br>Enter here the text of the all the footnotes in the CMM, in the order they appear in the original text. You can use the formatting options in the toolbar to better match the original text format (italics, bullet lists etc.) |
| **Taxonomy** | **Taxonomy Targets**<br>SYNC |

| | |
|---|---|
| **Targets** | Select the types and topics to which this CMM applies. To do this, simply typing the first letters of a keyword and choose from the suggested keywords, or click the arrow button and select from the list. Select as many keywords as you need. To remove a keyword, click on it and hit the "Delete" key.<br>▪ **Species Group**<br>▪ **Fishing Gears**<br>▪ **Fisheries Type**<br>▪ **Responsibility**<br>▪ **Requirement Type**<br>▪ **Topics**<br>*(to manage those vocabularies, go to Structure > Taxonomy >)* |
| **PDF** | Select the CMM's PDF file (relative to the CMM current language) that users will be able to download.<br>Files must be less than **8 MB**.<br>Allowed file types: **pdf**. |

| | |
|---|---|
| **Menu Settings** | Do not modify |
| **URL Path Settings** | Do not modify |
| **Revision Information** | Add a revision : Provide an explanation of the changes you are making. This will help other authors understand your motivations. |
| **Authoring Information** | Do not modify |
| **Publishing Options** | The checkbox “Published” must be checked unless your content will not be visible by anonymous users. An unpublished content is clearly identified by a “unpublished” flag or background text. |

Once everything has been filled, **click on the “Save” button.**

The CMM and all its data are now in the database, ready for being displayed and/or translated.

## Accessing a CMM / MCG

- **All English CMMs** are available at www.iotc.org/cmm/title-of-the-cmm.

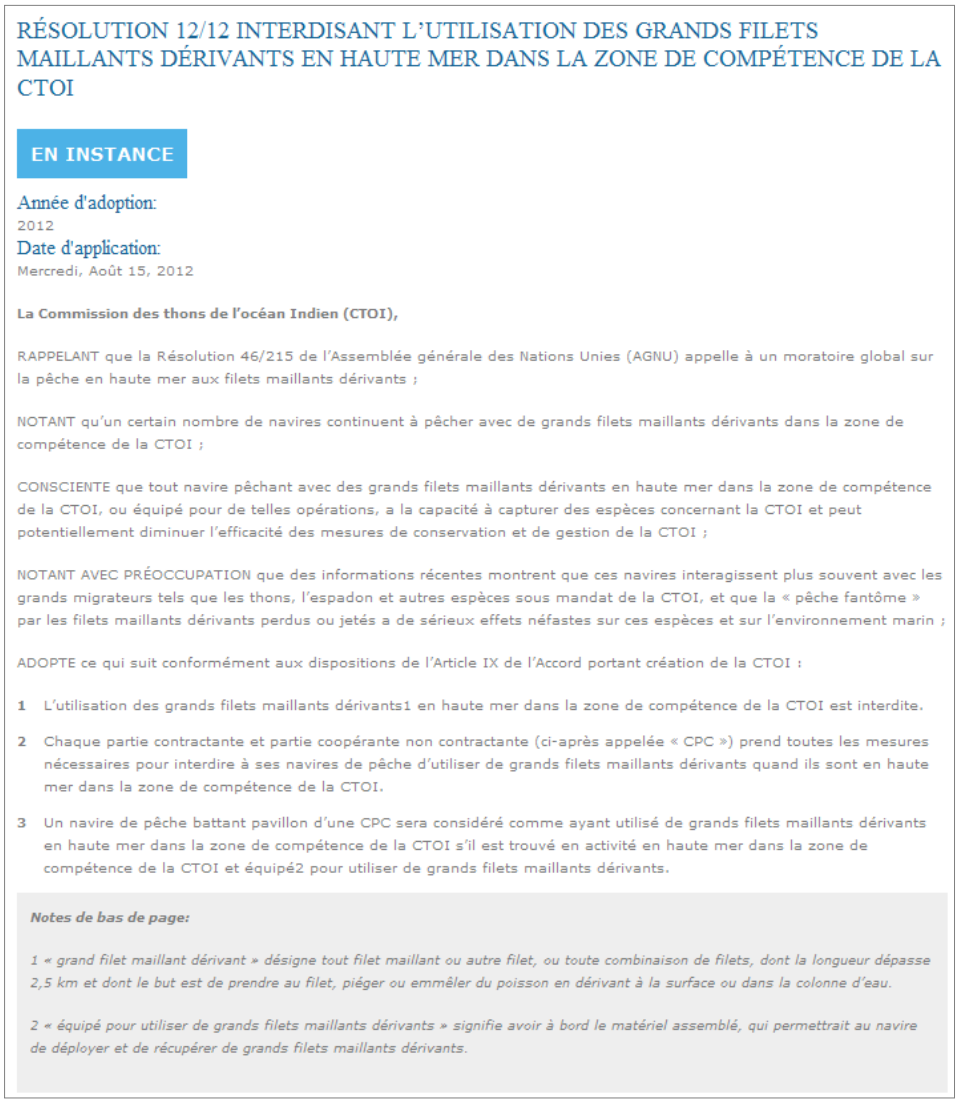
  *For example, the CMM called “RESOLUTION For example, the CMM called “RESOLUTION 12/12 TO PROHIBIT THE USE OF LARGE-SCALE DRIFTNETS ON THE HIGH SEAS IN THE IOTC AREA“ will be available at :* http://www.iotc.org/cmm/resolution-1212-prohibit-use-large-scale-driftnets-high-seas-iotc-area

- **All French MCGs** are available at www.iotc.org/fr/mcg/titre-de-la-mcg

  *For example, the MCG called “Résolution 12/12 Interdisant l’utilisation des grands filets maillants dérivants en haute mer dans la zone de compétence de la CTOI “ will be available at :* http://www.iotc.org/cmm/*résolution-1212-interdisant-l’utilisation-des-grands-filets-maillants-dérivants-en-haute-mer*

## Viewing an existing CMM / MCG

**As an anonymous user :** it is not possible to edit the data which are displayed.



RÉSOLUTION 12/12 INTERDISANT L'UTILISATION DES GRANDS FILETS MAILLANTS DÉRIVANTS EN HAUTE MER DANS LA ZONE DE COMPÉTENCE DE LA CTOI

EN INSTANCE

Année d'adoption:
2012
Date d'application:
Mercredi, Août 15, 2012

**La Commission des thons de l'océan Indien (CTOI),**

RAPPELANT que la Résolution 46/215 de l'Assemblée générale des Nations Unies (AGNU) appelle à un moratoire global sur la pêche en haute mer aux filets maillants dérivants ;

NOTANT qu'un certain nombre de navires continuent à pêcher avec de grands filets maillants dérivants dans la zone de compétence de la CTOI ;

CONSCIENTE que tout navire pêchant avec des grands filets maillants dérivants en haute mer dans la zone de compétence de la CTOI, ou équipé pour de telles opérations, a la capacité à capturer des espèces concernant la CTOI et peut potentiellement diminuer l'efficacité des mesures de conservation et de gestion de la CTOI ;

NOTANT AVEC PRÉOCCUPATION que des informations récentes montrent que ces navires interagissent plus souvent avec les grands migrateurs tels que les thons, l'espadon et autres espèces sous mandat de la CTOI, et que la « pêche fantôme » par les filets maillants dérivants perdus ou jetés a de sérieux effets néfastes sur ces espèces et sur l'environnement marin ;

ADOPTE ce qui suit conformément aux dispositions de l'Article IX de l'Accord portant création de la CTOI :

1 L'utilisation des grands filets maillants dérivants1 en haute mer dans la zone de compétence de la CTOI est interdite.

2 Chaque partie contractante et partie coopérante non contractante (ci-après appelée « CPC ») prend toutes les mesures nécessaires pour interdire à ses navires de pêche d'utiliser de grands filets maillants dérivants quand ils sont en haute mer dans la zone de compétence de la CTOI.

3 Un navire de pêche battant pavillon d'une CPC sera considéré comme ayant utilisé de grands filets maillants dérivants en haute mer dans la zone de compétence de la CTOI s'il est trouvé en activité en haute mer dans la zone de compétence de la CTOI et équipé2 pour utiliser de grands filets maillants dérivants.

***Notes de bas de page:***

*1 « grand filet maillant dérivant » désigne tout filet maillant ou autre filet, ou toute combinaison de filets, dont la longueur dépasse 2,5 km et dont le but est de prendre au filet, piéger ou emmêler du poisson en dérivant à la surface ou dans la colonne d'eau.*

*2 « équipé pour utiliser de grands filets maillants dérivants » signifie avoir à bord le matériel assemblé, qui permettrait au navire de déployer et de récupérer de grands filets maillants dérivants.*

*Figure : Viewing a CMM as anonymous user*

**As an identified user :** it is possible to edit the data which are displayed thanks to Drupal tab menu and direct editing links.

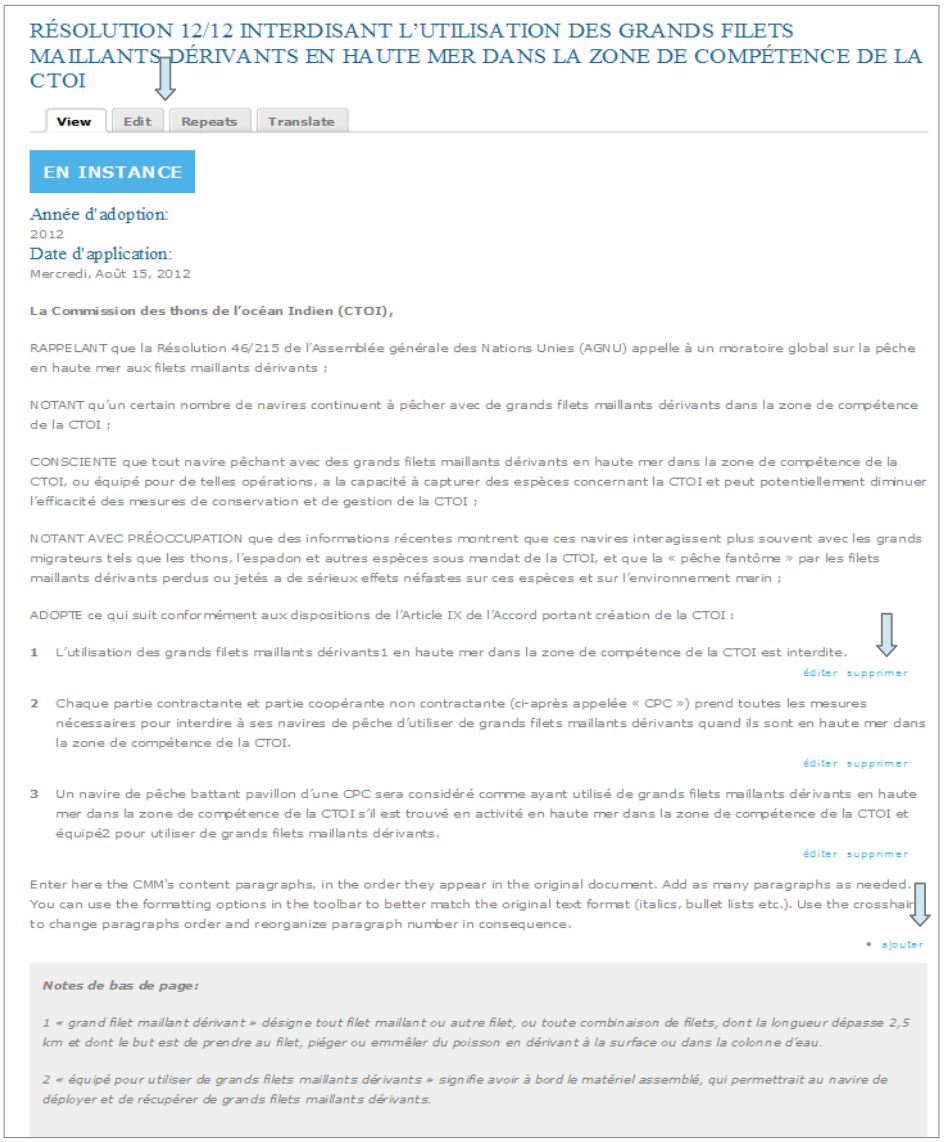



*Figure : Viewing a CMM as identified user*

## Editing an existing CMM / MCG

There are many ways to edit an existent CMM / MCG :

- You can browse all the CMMs by going to Content >
- You can go to the webpage of this CMM and use the little tab menu
- You can use the search tools (Basic and Advanced search) at any time.

*Figure : Editing an existing CMM with the little tab menu*

This tab menu will offer several options like "View", "Edit", "Repeats", "Translate". Other links will be added in the web page to let you edit specific parts of your CMM content (you can add/modify/delete dates, introductory, paragraphs …).

Choose the "Translate" tab will appear that will give you the opportunity to translate the actual content in the other language which will be the purpose of our next section.

## Translating a CMM / MCG

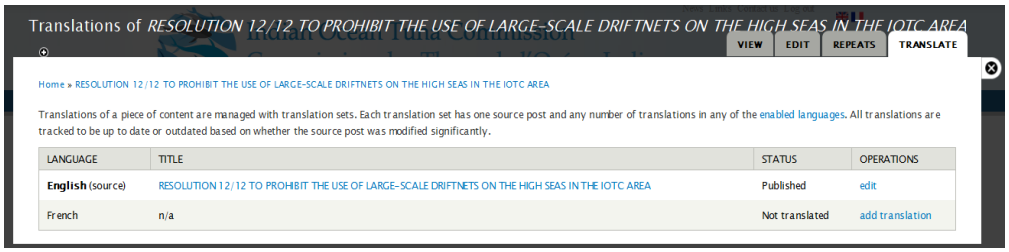



*Figure : Translate Tab list content*

In this example, RESOLUTION 12/12 has not been translated in French yet. Click on the "add translation" link to create the French version of this existing CMM in English.

You will have to repeat the same steps as previous but all the "neutral fields" will be already filled. Those "neutral fields" are :

- **CMM Title :** automatically filled with the other language *but requires to be modified.*

  **Important Note**
  This title needs to be translated and must not be identical to the other language title as this can leads to unexpected errors.

- **CMM Type** : automatically filled, any changes here will be synchronize in the other language.

- **CMM Number:** automatically filled, any changes here will be synchronize in the other language.

- **CMM Year of Adoption :** automatically filled, any changes here will be synchronize in the other language.

- **CMM Status** *(a part of it)* **:** any changes here will be synchronize in the other language except the list of the CMMs that have been entered.

  **Important Note**
  It is really important here to understand that the editor or the administrator will have to *re-enter* the list of CMMs that "supersedes" or is "superseded by" as a French CMM and an English CMM are two different entities in the actual Drupal configuration.

- **CMM Date of application :** automatically filled, any changes here will be synchronize in the other language.

- **CMM Deadline :** automatically filled, any changes here will be synchronize in the other language.

## Status of a CMM and particularities

A CMM (resolution only) can supersede one to several CMMs (resolution or recommendation) therefor some CMMs (resolution or recommendation) are superseded by a CMM (resolution only).

**In the current website, relationship between CMMs status and language cannot be set yet. It is therefore necessary to repeat some actions when you need to define a CMM "superseded by" or a CMM that "supersedes" another one in both language.**

*Example:*

Let's say we have in the database 3 CMMs in two different language where CMM 1 will supersedes CMM 2 and CMM 3. Here is the right way to recreate this situation in the CMM database application :

- You need to create the 3 CMMs (and the 3 MCGs which are their respective translation).
- You need to set the status of CMM 1 to “supersedes” and select CMM 2 and CMM 3 in the list
- You need to set the status of MCG 1 to “supersedes” and select MCG 2 and MCG 3
- You need to set CMM 2 and CMM 3 “to be superseded by” and then select CMM 1
- You need to set MCG 2 and MCG 3 “to be superseded by” and then select MCG 1

# THE WYSIWYG HTML EDITOR

IOTC website is using the WYSIWYG (What You See Is What You Get) editor from CKEditor. It is a free editor which offers excellent quality and features.

## Editing a text with CKEditor

- *Go to Content > and choose one of your CMM*
- *Click Edit on the content you want to edit (and the language of this content)*
- *Go to the paragraphs or appendices section where the CKEditor is loaded (of course CKEditor can be used in other areas of your website)*

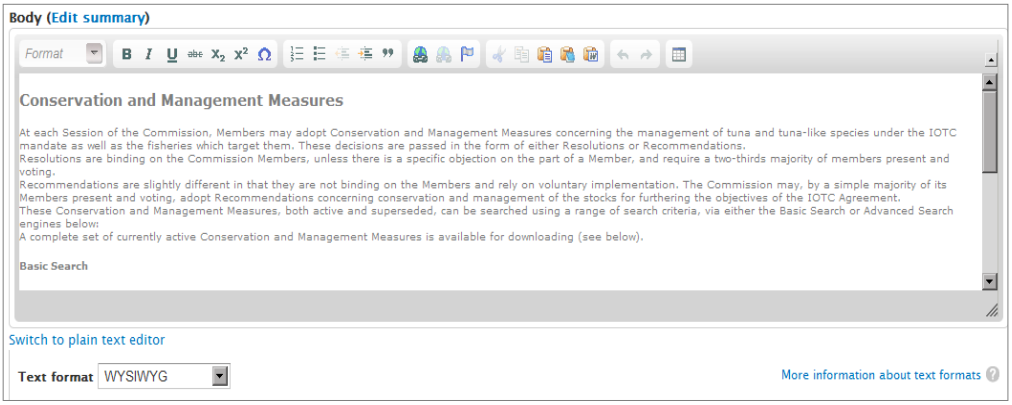



*Figure : CKEditor editing the CMMs default page*

***Format icons***

*The "format" drop downlist gives you the possibility to apply one of the title already set in your website. You can also apply standard bold, italic, underline, format using the following icons.*

***Links***

You can create a link to another webpage of the website, to an external website or even to an email by simply selecting your text and click on the following icon. You can also create a link to an anchor inside a webpage.

***Copy & Paste***

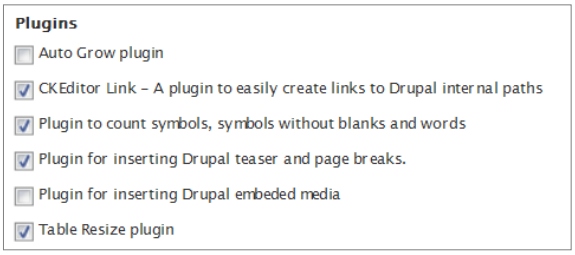
You have three different ways to copy and paste content from a PDF, a Word Document or from Internet :

- **Standard paste :** You can use the standard "paste" or "ctrl/cmd + C" command of your keyboard but beware that any hidden HTML tags of your PDF or Word Document will be saved in the database. Unfortunately, this last method can give unexpected display results on web browsers.
- **Paste without formatting :** This is the best (but longer) method. It will delete all the HTML tags that are hidden in your source document (whether it is a PDF or a Word document) and will ensure that the database will be feed with clean text data. Use the different icons to re-apply the format of your text.

- **Paste from Word :** It will keep your Word document format options

## Configuring CKEditor

- Go to Configuration > CKEDitor
- Choose the “Advanced” profile and click on “edit”
- You now have 7 options :
  - *Basic Setup :* do not change anything here. Filtered HTML and WYSIWYG must be checked.
  - *Security :* do not change anything here. Limit allowed HTML tags must be check and Security settings must be on “Always run security filters for CKEditor”.
  - *Editor Appearance :* default state must be enable, toggle must show, you can change the skin (graphic style) of the editor between Kama, Office 2003 and CKEditor V2. Keep the recommended settings below for buttons in the toolbar as other buttons WILL NOT be interpreted in Drupal correctly :




  - *Plugins* : please set as follows
  - Editor width must be kept at 100% to fill the page width.
  - Language must be set to English as this is the main language for content with auto-detect language.
  - *clean up and output :* do not modify anything here.
  - *CSS:* do not modify anything here
  - *File browser settings :* do not modify anything here. File Browser must be IMCE.
  - Advanced Options*:* do not modify anything here

# UI Specifications

**DEVELOPMENT OF AN ONLINE DATABASE FOR THE INDIAN OCEAN TUNA COMMISSION (IOTC) CONSERVATION AND MANAGEMENT MEASURES**

**Project ref. N° EA-5.2-B22**

**Region: East Africa**
**Country: Seychelles**

**July 24, 2012**
**Written by Stefano PIREDDA**

**Assignment by:**

This document is a response to IOTC's expectations issued in "Terms of Reference For DEVELOPMENT OF AN ONLINE DATABASE FOR THE INDIAN OCEAN TUNA COMMISSION (IOTC) CONSERVATION AND MANAGEMENT MEASURES" document and to Olivier Roux's "High-level requirements and specifications for the IOTC database of Conservation and Management Measures (CMMs)" document.

This document is about the UI (User Interface) for users. Users of a Drupal website can be :

- **Anonymous Users** (not identified, typically a visitor of the IOTC website)
- **Authenticated Users** (identified, not used in IOTC website)
- **Administrators** (they have access to everything on Drupal)
- **Editors** (they can only see and manage content, this user role should be created by Maven for the rest of the website)

**Important note**

To simplify this document :

- An "admin user" will refer to both administrator and editor identified in Drupal. Editing CMM (create, modify, delete) will be permitted for Administrators and Editors.
- A "web user" will refer to an administrator, an editor or an anonymous user when he's browsing website pages whether he is identified or not in Drupal.

## Introduction

Most paragraphs of this document are taken from Olivier ROUX's and Dr David WILSON's joint document called "High-level requirements and specifications for the IOTC database of Conservation and Management Measures (CMMs)". It has been modified to follow this IOTC UI proposal.

As the development phase is based on 16 working days (between July 25 to August 16) we need to focus on the most important requests listed by the IOTC and which are :

- Developing the application on a non-finalized version of the site of the IOTC currently based in Drupal 7 in both English and French,
- Allowing the IOTC administrator to create, edit and organize their keywords (called "vocabularies" in Drupal) that will be used in the CMMs,
- Allowing the IOTC administrator to create, edit, delete, revoke any CMM (resolutions and recommendations) as well as documents and images attached to them,
- Allowing public (not identified) web users to search and filter in basic and an advanced mode the CMMs database,
- Online help and/or a PDF document will explain the main features. Ideally, a one day training will be provided before August 17, 2012.

CMMs established since 1998 will have to be inserted manually by the IOTC team after the departure of the Expert. This work will take a few weeks that will need to be schedule as soon as possible. 2012 CMMs will be used to feed the database during the development phase and will be used as examples for the 1 to 2 days training.

Important notice

I draw the attention of the IOTC's team to an important point here: the site currently online is not finalised. It will be necessary to provide at least 1 to 2 days to do a fusion between the new database application based on the “not finalized” IOTC new website and the forthcoming “finalized” IOTC new website. This will have to be done when Maven is ready.

# Application requirement and features

## Rationale

The CMM database and web application aims at allowing a better dissemination of the IOTC CMMs.

The target audience for data dissemination is dual:

- The public at large: CPCs, other RFMOs, NGOs, etc. This audience will mostly look for CMM addressing particular topics like species, fishing gears, by catch etc.
- IOTC staff. IOTC has special needs regarding the CMM database, in terms of generating added value, like extracting lists of resolution actionable paragraphs dealing with a particular species or which have deadlines at a certain date etc.

In order to disseminate data, the application will need to allow for data entering and management by IOTC Secretariat staff.

The target audience for data management is limited to IOTC staff: entering data when new CMMs are adopted, editing existing data when errors are spotted or changes are made to existing CMMs (e.g. CMM superseded by a new one…). We won’t touch on the aspects of system management here as they should be common to the whole IOTC website (user managements, rights management, backups etc.).

Note: as for the rest of the IOTC website, the CMM database UI should be available in both English and French, as is its content. This means that, when doing a query from the English section of the app, the content should be returned in English (and the same with French).

This applies only to the dissemination side, as the data management will be made by IOTC staff thus can be limited to an English UI.

## Data management

The Data Management features cover the following:

- Data entry
- Data editing
- Reference data management

These features should only be accessible to authorised users with content editor privileges.

Two group of users will be created (as soon as it has no bad impact on Maven's work) :

- **Administrators :** that will have a complete access to Drupal and will be notified to any updates, core notifications, etc.
- **Content Editors :** that will have specific access to Drupal features related to CMMs and CMMs only.

## Data entry (create, edit, delete)

Data entry refers to the process of entering in the system each CMM. According to the proposed data structure, this process can be divided in two steps:

- Information about the CMM: title, number, date etc.
- Content of the CMM: introductory statement, actionable paragraphs, footnotes…

The process of creating/editing a new CMM to the system can thus be described by the following scenario:

- "admin user" selects the “ADD CMM” action
- "admin user" is presented with the “ADD CMM” screen
- "admin user" enters information and metadata related to the whole CMM
- "admin user" selects the “ADD PARAGRAPH” action
- "admin user" is presented with the “ADD PARAGRAPH” *group fields (number, text, date ...)*
- "admin user" enters information and metadata related to the whole paragraph
- "admin user" repeats steps 4-6 until all the CMM paragraphs have been added
- "admin user" selects the “APPEND PDF DOCUMENT” action
- "admin user" selects the PDF file for the current CMM on his computer in the File selection dialog and the file reference is attached to the form
- "admin user" selects the “SAVE CMM” action
- The new CMM is saved to the database, and the matching PDF file is uploaded to the server

This process will be on a single page, fields will be group with 'accordions' (giving the “admin user” the possibility to expand/reduce any group of fields.

The process would rely on web forms composed of different elements:

- text fields or text areas to enter… text
- drop-down menus to select a single value from a list of keywords (= vocabularies)
- select lists to select multiple values from a list of keywords (= vocabularies)
- radio buttons to choose between 2-3 mutually exclusive options
- file selection fields to upload images or PDFs

Important notes

Concerning the specific case of a Resolution that “superseded” another Resolution or a Recommendation. The solution retained in this first development is the possibility to edit a

Resolution or a Recommendation and to “tag” it as “superseded” and to select the new one to provide a link to this new resolution. If more than one recommendation or resolution are going to be superseded, the “admin editor” will need to search, edit and modify each CMM one after another.

At this time no validation feature is going to be implemented as this will need a deep organization between editors and moderators. Related to the validation of content is the ability to follow each modifications made for a document, this revisioning feature has been added to this proposal.

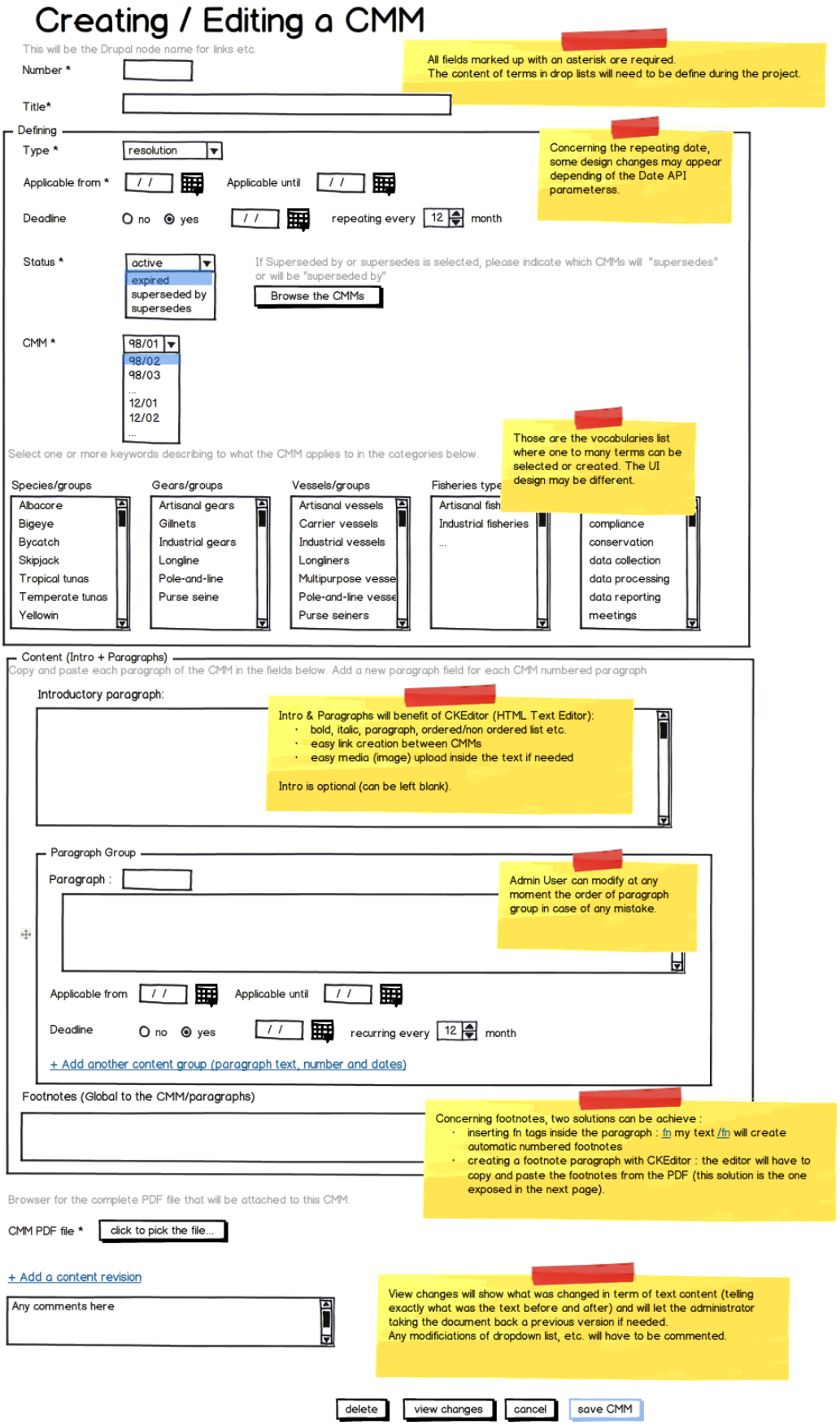



Figure : Adding a new CMM

## Data Editing

Data editing refers to the process of making changes to an existing CMM.

The process of editing an existing CMM can thus be described by the following scenario:

- "Admin user" identifies the CMM to be edited (default Drupal content search tool)
- "Admin user" selects the “EDIT CMM” action (if possible an alert will be display during editing)
- "Admin user" is presented with the “EDIT CMM” *group fields*
- "Admin user" edits the CMM as needed
- "Admin user" selects the “SAVE CMM” action
- The edited CMM is saved to the database

The “Edit CMM” button could be displayed on the screen displaying the text of a CMM when the "admin user" is logged in. Preferably, editing data would use the exact same tool as entering data: same web forms, but with prepopulated fields and buttons to delete elements (like removing a paragraph, an appendix or a figure).

## Reference data management

The system will have to provide an interface for the IOTC editors to manage the reference tables used by the CMM DB application.

An important point to take into account is that any change done to a reference table will have potential impacts on the whole database. In particular, deleting an entry in a reference table will impact all CMM or paragraph records that are “tagged” with this particular reference value, creating a possible database error. There should thus be a mechanism for preventing this or, at least, dealing with the consequences.

## Data dissemination (BASIC Search)

The dissemination of online data can usually be divided in three steps:

- Searching for the requested data
- Browsing a list of possible matching results
- Displaying the pertinent matches

## Search

According to the data structure and the most common uses of the CMMs, the following search criteria can be made available to users:

- CMM type: resolution/recommendation/both (default: Resolution)
- Year of adoption (default: ALL)

- CMM number (might as well use one single field for both Tile and Number search) (default: ALL)
- Type: Active yes or No: Only active CMMs or including superseded/deprecated CMMs (default: active)
- Species or species group: pick from a list of available species/species groups (default: blank)
- Gears: pick from a list of available gear types (default: blank)
- Vessels: pick from a list of available vessel types (default: blank)
- Fisheries: pick from a list of available fisheries types (default: blank)
- Title: free text search for text within a CMM title (default: blank)
- Topics: pick from a list of available topics (default: blank)
- (Content: free text search within CMMs paragraphs –to be decided) (default: blank)

*Note: "(default: blank)" means that this criteria will not be used as a search criteria.*

**This is a filtered search tool.** The "web user" can use one to X filters (see below) and/or a keyword that will look for word in both title and content. This will be a AND search between filters (a list of keywords, a search box or Boolean filed) but an OR search for multiple selection of keyword in a filter.

The BASIC search form offers the following user-selectable search criteria:

- STATUS: Active OR Superseded OR Both (default: Active)
- TYPE: Resolutions OR Recommendations OR Both (default=Resolutions)
- YEAR: CMM adoption year, starting at 1998 and going to the current year (Default value = ALL)
- CMM NUMBER : the number of the CMM e.g. 98/03 (Default = ALL)
- SUBJECT AREAS: species, gears, vessels types, fisheries types (default: ALL)
- SPECIES: list of species where the "web user" can select one or more species (default = ALL)

The BASIC search uses the following default values that are NOT visible/accessible to the "web user":

- SEARCH FOR: returns only CMM titles (default: CMMs, see ADVANCED below)

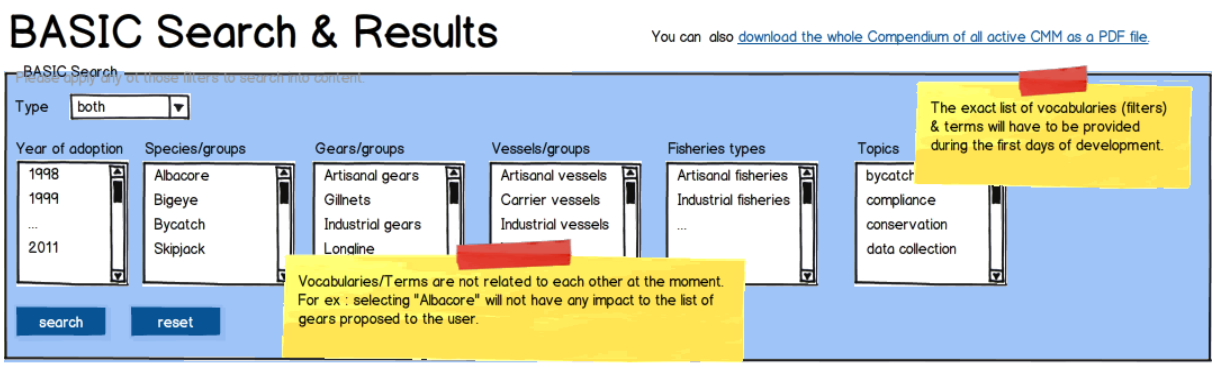



Figure : Searching for CMM, BASIC search

Default behaviour : if the "web user" does not select any of the filters, the search engine will deliver an “all CMMs” result page : this can be modified at any time by the administrator only. The default sort criteria will be the most recent texts.

Important notice

As keywords lists and contents are not directly related, the list will always be made of the entire list of each gears, vessels, fisheries or topics.

## Search Results list

Once the "web user" has entered the search criteria and hit the “SEARCH” button, the system displays results list, i.e. a list of CMM matching the "web user’s" criteria. The results list should be displayed below the search form that the "web user" has just used, complete with all search criteria selected.

The search will be performed on the metadata of both the CMM and its paragraphs. For example, a search for “species=ALB, YFT” should return CMMs that are tagged with ALB, CMM tagged with YFT as well as CMMs which have paragraphs tagged with ALB or YFT. The result list will be fairly simple to read and carry the strict minimum of information so as to be readable.

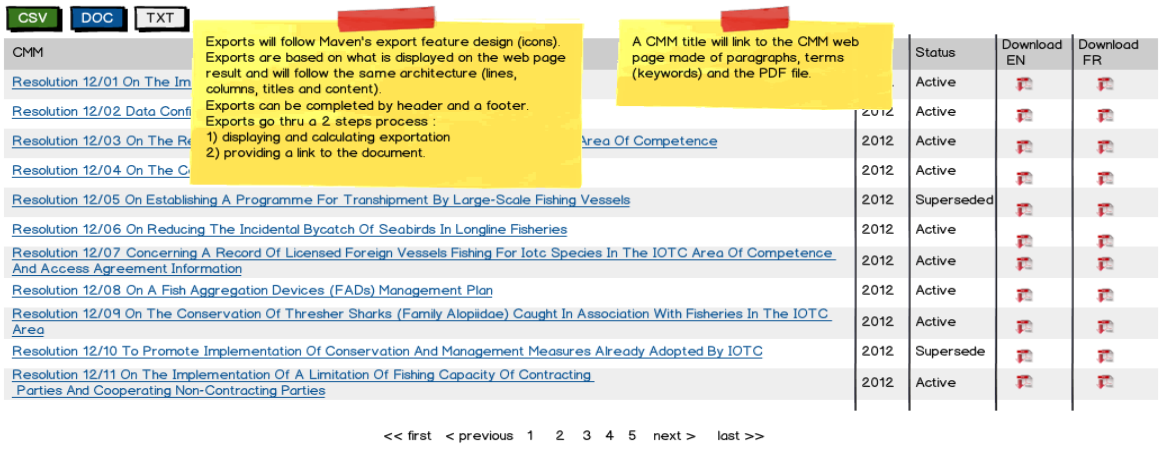



Figure : Searching for CMM, BASIC search results list

Each line of result will be a link to the display of the actual CMM. The results list will be paginated so as to allow for long lists of results with a previous/next and first/last link to quickly browse the entire

database. Image links will allow the "web user" to export the results list (only the list, NOT the actual CMM texts) as a text document (TXT, CSV or DOC).

A button/link should allow the "web user" to download each CMM as a PDF file. This PDF file is NOT generated on the fly from the DB, but will be the file that has been uploaded during the CMM entry process.

Important Notes

If a CMM has been deprecated or superseded, the download link will be still displayed. The "web user" will be invited to access the CMM webpage where a link will point to the new CMM.

A link to the “the whole Compendium of all active CMM as a PDF file” will also be provided. This will be part of the header in the web page and the “admin user” will have total control on the link title and the PDF itself (browse and upload from his computer).

The display of each paragraph in a CMM will be “enriched” with some metadata:

- If a paragraph mentions another CMM, and if the editor or the administrator has provided this link during the data process, the reference will provide an hyperlink allowing the "web user" to access that CMM.
- Metadata could be displayed for each paragraph, but in a non-obtrusive way: it should not get in the way of reading the CMM. A solution could be to display a small link along with each paragraph that has some metadata attached, so that a "web user" could click on it and show said metadata (or click again and hide it). Said metadata would include:
  - Deadline applicable to the paragraph, including recurrence.
  - List of species/species groups/gears/vessel types/areas/fishery types/topics to which the paragraph applies.

## Data dissemination (ADVANCED mode)

Expert dissemination is made at the granularity of CMM paragraphs (for CMM-level granularity, see “Data dissemination (BASIC)”). This allows for retrieval of only the parts of CMMs that are relevant to a "web user"’s search, which allows things like compiling a list of actionable paragraphs dealing with a particular topic.

## Search

The ADVANCED search form offers **all the BASIC search criteria**/fields, **plus the following search criteria**, which are hidden in BASIC search (see above), offering the same default values:

- STATUS: ACTIVE ONLY. – Static text on search screen. Only Active can be search para by para.
- SEARCH FOR: Searching for CMMs (titles and paragraphs) will return the text of the CMM paragraphs matching the query. (default: CMMs). *It will possible to sort the results list by paragraph or introduction.*
- TYPE: allows to choose to search for both Resolutions and Recommendations (default: both)
- GEARS: allows to choose to search for specific gear types (default: all)
- VESSELS: allows to choose to search for specific vessel types (default: all)
- FISHERIES: allows to choose to search for specific fishery types (default: all)
- TOPICS: allows to choose to search for specific topics (default: all)

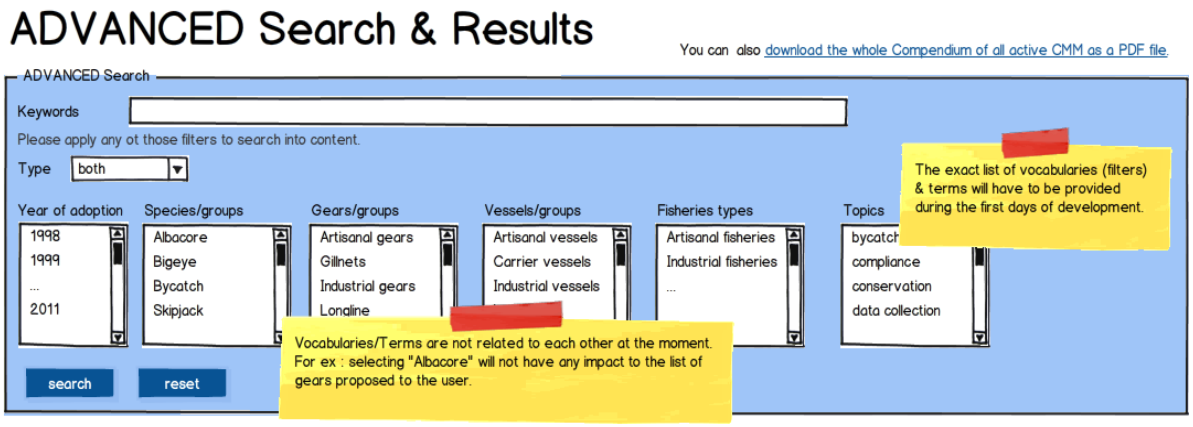



Figure : Searching for CMM, ADVANCED search

### Results list

The results list will display CMMs and the related paragraphs list matching the "web user's" query as follow :

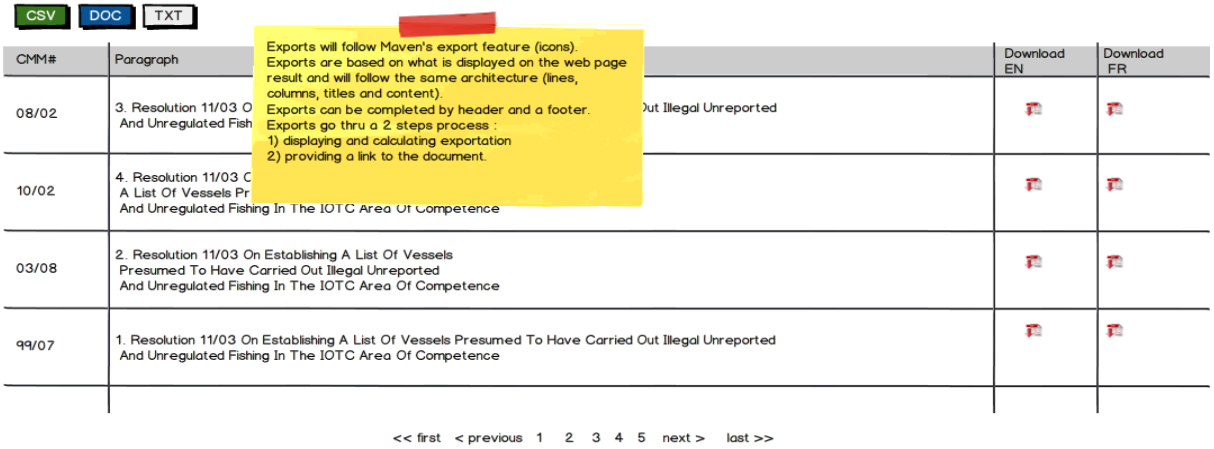



Figure : Searching for CMM, ADVANCED search results list

Paragraph will be fully displayed (but *if possible* the display will be limited to a certain length and the whole text will be dynamically displayed when "web user's" mouse rollover the text) and will link to the CMM directly to the paragraph (using link anchor). Paragraph number and text has to be placed together as this will simplify "admin user" for creating unlimited paragraphs.

Each line of result will be a link to the display of the actual CMM. The results list will be paginated so as to allow for long lists of results with a previous/next and first/last link to quickly browse the entire database. Image links will allow the "web user" to export the results list (only the list, NOT the actual CMM texts) as a text document (TXT, CSV or DOC).

A button/link should allow the "web user" to download each CMM as a PDF file. This PDF file is NOT generated on the fly from the DB, but will be the file that has been uploaded during the CMM entry process.

Important Notes

If a CMM has been deprecated or superseded, the download link will be still displayed. The "web user" will be invited to access the CMM webpage where a link will point to the new CMM.

A link to the "the whole Compendium of all active CMM as a PDF file" will also be provided. This file will be uploaded directly on the server by FTP as this is a very large file.

## Data dissemination (BASIC & ADVANCED mode)

### Display of individual results

When the "web user" clicks on a CMM title in the results list, the system displays the CMM as it has been created in Drupal.

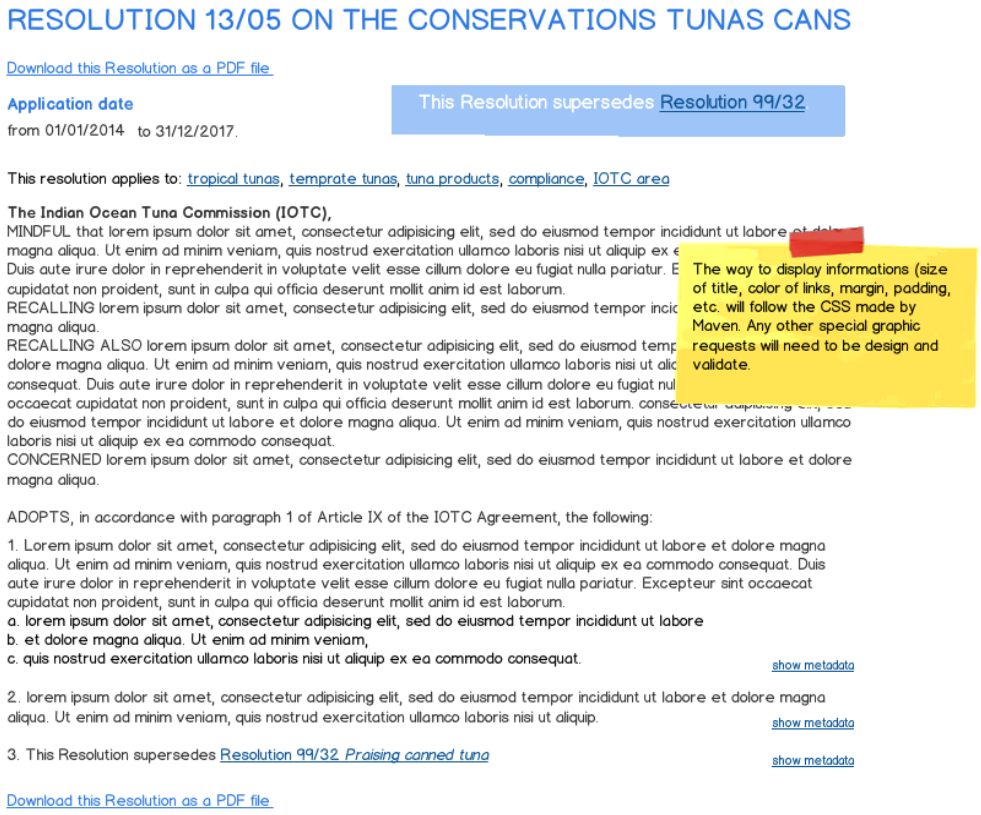
The CMM is actually assembled from the database as follows:

- Full Title: *CMM type CMM number CMM Title* (e.g. Resolution 06/04 On reducing incidental by-catch of seabirds in long line fisheries)
- CMM paragraphs, ordered by their number (para_number), starting with the introductory statement, followed by the actionable paragraphs and wrapped up by the optional CMM reference. *It will possible to sort the results list by paragraph or introduction.*
- Footnotes: all footnotes are added at the end of the CMM paragraphs, ordered by their number (footnote_number) and formatted.
- Appendices: no appendices are displayed, only the list text entered by the admin editor. The "web user" is invited to download the PDF instead.

The display of a CMM could be “enriched” with some metadata.

- A highly visible mention (see proposition as follows) when the CMM has been superseded or deprecated, along with the date of application. In both cases, the CMM should be visually presented so that it is obvious that it is not active anymore. When it has been superseded, there should be a reference to the superseding CMM(s), which would be a link to the corresponding CMM(s).
- Date of adoption/applicable from/applicable to
- List of Deadline(s) date(s) applicable to the CMM, including recurrence.
- List of Terms (species/species groups/gears/vessel types/areas/fishery types/topics) to which the CMM applies.

*Those previous expectations will be achieved exclusively by editing the current CSS template.*



RESOLUTION 13/05 ON THE CONSERVATIONS TUNAS CANS

Download this Resolution as a PDF file

**Application date**
from 01/01/2014 to 31/12/2017.

This Resolution supersedes Resolution 99/32

This resolution applies to: tropical tunas, temprate tunas, tuna products, compliance, IOTC area

**The Indian Ocean Tuna Commission (IOTC),**
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magna aliqua.

The way to display informations (size of title, color of links, margin, padding, etc. will follow the CSS made by Maven. Any other special graphic requests will need to be design and validate.

ADOPTS, in accordance with paragraph 1 of Article IX of the IOTC Agreement, the following:

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c. quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. show metadata

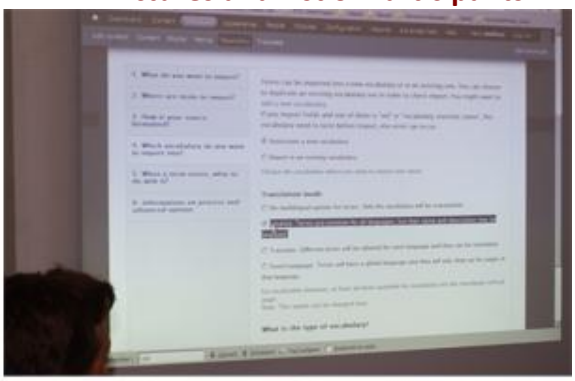
2. lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip. show metadata

3. This Resolution supersedes Resolution 99/32 *Praising canned tuna* show metadata

Download this Resolution as a PDF file

Figure : Searching for CMM, display of individual result

## Annex 6: 1-day Training Pictures and List of Participants:



ACP Fish II

DAILY ATTENDANCE LIST

IOTC website training - REF: EA-5.2-B22:
16th August 2012, Victoria, Seychelles

| Last Name | First Name | Position | Country | Signature |
|---|---|---|---|---|
| PILIOTIS | DONNA | IT MANAGER | UK | |
| Marie | Claudia | Programme Assistant | Seychelles | |
| GOVINDEN | MIRODE | Bilingual Secretary | Seychelles | |
| ANGANUZZI | ALEJANDRO | SECRETARY | ARGENTINA | |
| MILLION | JULIEN | FISHERY OFFICER | FRANCE | |
| WILSON | DAVID | Sp. Sec. | SEZ. | |
| DOMINGUE | CEDRIC | Compliance Coord | Sez | |
| GUROUX | FLORIAN | Compliance Officer | SEZ | |

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